DOCUMENT RESUME

ED 330 503 RC 018 047

AUTHOR	Neyland, Leedell W.
TITLE	Historically Black Land-Grant Institutions and the Development of Agriculture and Home Economics, 1890-1990.
INSTITUTION	Florida A and M Univ. Foundation, Inc., Tallahassee.
SPONS AGENCY	Economic Research Service (DOA), Washington, DC. Agriculture and Rural Economics Div.
PUB DATE	90
NOTE	356p.; "With special assistance from Esther Glover Fahm."
PUB TYPE	Books (010) -- Historical Materials (060)
EDRS PRICE	MF01/PC15 Plus Postage.
DESCRIPTORS	*Agricultural Colleges; Agricultural Education; Black Achievement; *Black Colleges; Black Education; *Black Institutions; *Educational History; Higher Education; *Home Economics Education; *Land Grant Universities; Rural Extension; Teacher Education
IDENTIFIERS	Morrill Act 1862; *Morrill Act 1890

ABSTRACT

Since 1890, historically black land-grant colleges and universities have delivered quality teaching, research, and extension service primarily to black people in Southern and border states. The Second Morrill Act of 1890 required that all land-grant funds be equitably divided in states that maintained separate schools for races. Tuskeegee University and 17 other institutions were directly affected by this act. Beginning primarily for training black teachers, these institutions evolved into land-grant colleges and universities providing opportunities to students across the nation and throughout the world. Known as the 1890 colleges and universities, these Southern institutions have developed research capabilities and an extensive extension service. The nine chapters of this book trace the development of the 1890 land grant colleges and universities between 1890 and 1990 and outline the challenges of the future. Appendices include the text of the 1890 Second Morrill Act, home economics-related classes at 1890 Colleges and universities, and profiles of 1890 land-grant institutions. An index is included and the bibliography contains over 250 references. (ALL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED330503

HISTORICALLY BLACK LAND-GRANT INSTITUTIONS AND THE DEVELOPMENT OF AGRICULTURE AND HOME ECONOMICS

1890-1990

by

LEEDELL W. NEYLAND

with sp[illegible]stance from
Esther [illegible] Fai

1890 LAND-GRANT COLLEGES AND UNIVERSITIES CENTENNIAL CELEBRATION
1890 1990

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Leedell W. Neyland

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it

☐ Minor changes have been made to improve reproduction quality

- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

FLORIDA A&M UNIVERSITY FOUNDATION, Inc.
Tallahassee, Florida

RC018047

BEST COPY AVAILABLE

HISTORICALLY BLACK LAND-GRANT INSTITUTIONS AND THE DEVELOPMENT OF AGRICULTURE AND HOME ECONOMICS, 1890–1990

This publication was made possible
by a grant from the
National Economy and History Branch
Agricultural and Rural Economics Division
United States Department of Agriculture
Washington, D.C.

HISTORICALLY BLACK LAND-GRANT INSTITUTIONS AND THE DEVELOPMENT OF AGRICULTURE AND HOME ECONOMICS

1890–1990

by

LEEDELL W. NEYLAND

with special assistance from
Esther Glover Fahm

1890 LAND-GRANT COLLEGES AND UNIVERSITIES · CENTENNIAL CELEBRATION ·
100 Years of Service
1890 1990

FLORIDA A&M UNIVERSITY FOUNDATION, INC.
Tallahassee, Florida
1990

COPYRIGHT, 1990—Florida A&M University Foundation, Inc.

LIBRARY OF CONGRESS # 90-084536

About The Author

LEEDELL W. NEYLAND, professor of history and former Dean of Arts and Sciences and interim Vice President for Academic Affairs at Florida A&M University, was born in Gloster, Mississippi, and received his early education there at the Amity County Training School. For a period of six years he served as a steward in the United States Navy. He received his A.B. degree from Virginia State University in 1949, and his M.A. and Ph.D. degrees from New York University in 1950 and 1959 respectively, the latter while studying under a Danforth Teachers Grant. His doctoral major was in Recent American History, with minor concentrations in Sociology and Modern European History. Formerly associate professor at Grambling University in Louisiana, he has also served as dean of the college at Leland College in Baker, Louisiana and Elizabeth City State University in North Carolina. He has contributed to the *Florida Historical Quarterly, Negro History Bulletin, Social Education, Journal of Higher Education Among Negroes, Social Studies, Vital Speeches* and other professional and scholarly journals. Also, he has published five books: *The History of Florida Agricultural and Mechanical University, Twelve Black Floridians, The History of the Florida State Teachers Association, The History of the Florida Interscholastic Association, and Florida Agricultural and Mechanical University: A Centennial History—1887–1987.*

He is widely sought by educational, civic and religious groups as a speaker, lecturer and consultant. He has appeared and rendered specialized services at such institutions of higher learning as the University of Minnesota, University of Mississippi, University of Miami, University of Florida, Southern University, Albany State College, Stetson University, Elizabeth City State University and others. He has also conducted or coordinated numerous workshops and seminars on intercultural/multicultural education, incorporating minority studies into the curriculum, and on desegregation in schools, colleges and universities. He is married to the former Della L. Adams, a retired kindergarten teacher at FAMU High School, and they have three children—Beverly, a pediatrician; Keith, a lawyer; and Katrina, a reading specialist at Florida A&M University. He is an active member and elder of the Trinity United Presbyterian Church in Tallahassee and is also active with professional, civic and religious organizations on the local, state and national levels.

FOREWORD

For one hundred years historically black land-grant colleges and universities have delivered an increasingly high quality of teaching, research and extension service primarily to black people in Southern and border states. Although the land-grant system had been effectively operating across the United States since 1862, legal participation by black schools was made possible by the passage of the Second Morrill Act of 1890. This Act required that land-grant funds be equitably divided in states that maintained separate schools for the races. So under what became known as a "separate-but-equal" policy, 1890 institutions began their mission with inadequate funding and with all of the disabilities of a racially segregated society.

It is appropriate on this 100th Anniversary of the Second Morrill Act of 1890 that we look back over the years of struggles, failures, contributions and achievements of the seventeen institutions and Tuskegee University which were directly affected by this Act. Beginning primarily as teacher training institutions for blacks, they have evolved into outstanding land-grant colleges and universities which provide educational opportunities to students from across the nation and on the international scene without regards to race, color, creed, sex, or national origin.

This volume by Professor Leedell W. Neyland of the Department of History, Political Science and Economics at Florida A&M University gives a brief overview of the growth and development of agriculture and home economics in 1890 institutions. Although it was not until the 1920s that the majority of these schools were able to offer bachelor degrees in agriculture and home economics, they have historically been the source of initial degrees for blacks. The developmental drama of 1890 institutions has been played out on stages where institutional survival was the main act and where turmoil, sacrifice, neglect, and perennial threats of abolition or merger were principal players. Nevertheless, through the dedication of the Conference of Presidents of Negro Land-Grant Colleges (now Council of Presidents/Chancellors) administrators, faculty, students and alumni, the hopes and aspirations of preserving and strengthening historically black land-grant colleges and universities and their social heritage have prevailed and prospered.

With increases in federal funding for research during the last quarter of a century, the 1890 colleges and universities have demonstrated their ability to do quality research and deliver extension services to limited-resource farmers, minority groups, youth at risk, depressed urban areas, and to underdeveloped and Third World countries. Because they have the expertise, compassion and empathy combined with the scientific and technological know-how, historically black colleges and universities are ideally suited to deliver "excellence with caring" to the people who need it most. As matching and support funds from the several states are received in equitable proportions to 1862 institutions, the state and nation will profit immeasurably from the land-grant functions of 1890 institutions. Thus, this volume should help us to look at the past with pride and look to the future with hope as we enter the twenty-first century prepared to meet the challenge of improving the quality of life for all humankind.

Frederick S. Humphries
President
Florida A&M University

CONTENTS

ABOUT THE AUTHOR v

FOREWORD vii

PREFACE xii

1. The Land-Grant Idea
   and Black Colleges Under the Morrill Act of 1862 1

2. From Exclusion to Inclusion:
   The Impact of the Morrill Act of 1890 (Part 1). 17

3. From Exclusion to Inclusion:
   The Impact of the Morrill Act of 1890 (Part 2) 45

4. Strength in Unity: The Conference of Presidents of Negro
   Land-Grant Colleges, 1923-1955 77

5. Teaching, Academic Programs,
   and Research from 1920 to 1967 94

6. Research in 1890 Institutions Since 1967 112

7. Cooperative Extension Service in 1890 Institutions 147

8. Home Economics:
   Our Roots, Our Present, Our Future 190

9. Shadows from the Past:
   Challenges of the Future 253

ILLUSTRATIONS . . . . .Follows 146

BIBLIOGRAPHIC NOTES 277

FOOTNOTES 291

APPENDICES 311

INDEX 322

PREFACE

In an effort to assure opportunity for land-grant education to the black citizens of this nation, Congress passed the Morrill Act of 1890, which provided that land-grant funds be equitably divided in states where separate schools for blacks and whites were maintained. While the First Morrill Act of 1862 did not exclude blacks in its attempt to democratize education, Southern customs, traditions, and laws requiring racial segregation prevented blacks from becoming full partners in this new educational venture. Although four states—Mississippi, Virginia, South Carolina, and at a much later date, Kentucky—divided 1862 land-grant funds between their black and white institutions, it was not until the passage of the Second Morrill Act that seventeen black schools began developing a distinct character as 1890 land-grant institutions.

As the centennial of the 1890 land-grant college system is celebrated, various books will be written reflecting on the contributions this educational system has made through instruction, research, extension, and international development. This book is a panoramic overview of the development of agriculture and home economics in the 1890 institutions during the last one hundred years. Due to the lack of time and resources, it was recognized by the author that a definitive and more comprehensive history could not be written at this time. Nevertheless, this volume explores factors which led to the passage of the Morrill Act of 1890, the evolution of agricultural and home economics programs in the 1890 institutions and Tuskegee University, and the impact of these programs on teacher training, research, and extension service on rural constituents and on Southern agriculture and rural life in general.

Throughout the volume consideration has been given to threads of adversity which have been woven into the developmental fabric of all historically black land-grant institutions: the debilitating effects of racial segregation; inadequate appropriations at both the state and federal levels; undesirable restrictions on institutional mission or role and scope; the struggle for appropriate "enhancement" under the federal mandate for a unitary system of higher education in the several states; the threats of abolition, merger and transfer of individual programs; and the inability to recruit an adequate number of faculty and students to programs in agriculture and home economics. I have tried to identify these difficulties and at the same time emphasize the many contributions to society made by the 1890 land-grant schools.

Specific attention has been given to the changing role and attitude of the U. S. Department of Agriculture during the last twenty-three years. Sustained federal funding for 1890 institutions and Tuskegee University in research and extension service contributes not only to the well-being of limited-resource farmers and rural clientele, but to the general development of the South and the nation as well. Examples of outstanding research and service by professors, extension agents, and specialists as well as a general survey of the course of study offered to thousands of minority students at these schools each year reveal the value of the 1890 land-grant system as "a vital national resource."

A special feature of the book is Chapter 8, "Home Economics: Our Roots, Our Present, Our Future," which was written by Dr. Esther Glover Fahm, Chairperson of the Department of Home Economics at Alcorn State University. In her own scholarly manner she has traced the development of home economics in each of the 1890 land-grant institutions, focusing on teaching, research, and extension service. The chapter is included as submitted, using the documentation method chosen by Dr. Glover.

Despite shadows from the segregated past and many challenges to the very existence of 1890 institutions over the years, in approximately two decades scientists at 1890 schools have made significant contributions in animal science, human health and nutrition, rural development, aquaculture, plant biotechnology, environmental quality, postharvest technology, rural revitalization, alternative agricultural opportunities and other fields of research. It is the success in these areas and the growing influence of 1890 land-grant colleges in international development which merit attention as we move rapidly toward the twenty-first century.

In the preparation of this volume, I am indebted to so many people and agencies for assistance that any list of acknowledgements will inevitably contain some omissions. Special thanks must be given to Dr. Douglas E. Bowers, Head of the Agricultural and Rural History Section, U. S. Department of Agriculture, whose office provided the grant funds to underwrite the research, compilation and publication for this volume, and to Dr. Robert D. Carroll, Vice President for Administrative Affairs who provided special assistance and resources which enabled me to complete the manuscript in a timely manner. Dr. Aubrey M. Perry, Dean of the College of Arts and Sciences, and his staff; Dr. Larry E. Rivers and his staff in the Department of History, Political Science and Economics; Dr. Charles E. Kidd, Dean of the College of Engineering Science, Technology, and Agriculture, and his staff; Dr. R. Grant Seals, Director of International Programs; and Dr. Charles U. Smith, Dean of the Graduate School, Research and Continuing Education, Mrs. Linda Hudson, Assistant to the Dean, and all at Florida A&M University encouraged and assisted me in a variety of ways. Dr. Lawrence Carter, Director of Cooperative Extension Service, read portions of the manuscript and provided considerable technical assistance and financial resources, and Dr. Charles Vincent, Professor of History at Southern University, provided historical information on his institution.

Special acknowledgments should be given to Professor James N. Eaton and his assistants, Miss Mozura Farmer and Mr. Titus Brown, of the Black Archives, Museum, and Research Center for their willingness to search for documents and information; and to Mr. Keith J. Harvey, Information Specialist with Cooperative Extension Service, who helped to select and arrange the photographs, to Dr. Emma J. Dawson who graciously gave of her time to index the book and to Dr. Anne R. Gayles for valuable research assistance. Mr.

Frank C. Olds, Mr. Nelson Bennett, and the staff of the Office of Sponsored Research were most helpful in keeping financial records in order and advising me on the use of grant funds.

A number of administrators, faculty, and friends have read parts or all of the manuscript and have made many valuable suggestions. Among them were Dr. Sunil K. Pancholy, FAMU's Agricultural Research Director; Dr. Sidney Evans, former Agricultural Research Director at North Carolina A&T State University; Mr. Nathaniel Saylor, retired professor of agriculture; Dr. Lawrence Carter; Dr. Margie Rauls, associate professor of English; Atty. Robert L. Williams, professor of history; Mrs. Della L. Neyland (my wife), and others. Thanks must also be given to the Agricultural Research Directors and the Directors of Cooperative Extension Programs at 1890 institutions for their aid and assistance.

I owe more than can be acknowledged here to Mrs. Joyce Guyette of St. Andrews, Tennessee, who criticized, edited, read and reread all versions of the manuscript, and Mrs. Imogene Roach, Senior Executive Secretary to the Vice President for Administrative Affairs, who tirelessly typed the seemingly endless revisions of the chapters; Mr. Archie V. Hannon, Instructor of Graphic Arts, who prepared the camera ready copy; Mr. James L. Bruton, Director of Media and Graphic Arts, who gave guidance and assistance on structural arrangements and technical aspects of production; and Mrs. Dorothy P. Williams, Assistant Vice President for University Relations, who provided valuable advise on publication procedures. And finally, thanks should be given to Ms. Marilyn Lovett Tisdale, my graduate assistant, who helped with the research, placed the entire manuscript on the word processor, and made many other valuable contributions.

Leedell W. Neyland

CHAPTER ONE

The Land-Grant Idea and Black Colleges Under The Morrill Act Of 1862

THE history of land-grant institutions in the United States "is the story of the growth of an idea—an idea centered in the democratization of higher learning."[1] The germination of this idea was quickened by the throes of the Civil War, the westward expansion of diverse groups in response to cheap and free land on the frontier, the call by university leaders and professional groups for agricultural and industrial training, and the increasing demands of the new industrialized nation that institutions of higher learning be established for all aspiring young people who found existing institutions and courses of study unavailable or unacceptable.

The crystallization of the idea for these "democracy's colleges" or "people's universities" was clearly set forth in the Morrill Act of 1862, a revolutionary educational measure which was pushed through Congress by U. S. Representative Justin Smith Morrill (later Senator), a Whig from Vermont. The Act provided for the establishment of the most comprehensive system of scientific, technical and practical higher education the world had ever known. In brief, the Act provided that 30,000 acres of federal public land be allotted to each state based on its number of senators and representatives under the apportionment of 1860. It further provided that all monies derived from the sale of the land would be invested in stock of the United States or other safe stock yielding at least five percent dividend or profit and that each state would use these proceeds

> to the endowment, support, and maintenance of at least one college where the leading object shall be, without excluding other scientific and classical studies and including military tactics, to teach such branches of learning as are related to agricultural and mechanical arts, in such a manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions of life.[2]

From the very beginning, there was considerable misunderstanding of purpose and various interpretations of the meaning of the Act creating these colleges. When questioned about the intent, Morrill stated that he wished "the bill to be broad enough so that the several states might use it to the best advantage; and that for the best use of this fund there must be much variety allowed to the details, although all the colleges should be the same in spirit and essentially of the same grade, that is, colleges in which science and not classics should be the leading idea."[3] He strongly contended that he did not intend for the Act to emphasize agricultural and industrial education to the exclusion of scientific and literary education and that "it never was intended to force the boys of farmers going into these institutions so to study that they should all come out farmers. It was merely intended to give them an opportunity to do so and to do so with the advantages if they saw fit."[4]

The first Morrill Act did not make any reference to race in the division of land-grant funds; therefore, these new colleges, especially in the Southern and border states, were free to grow and develop on a strictly segregated basis. Since approximately 90 percent of the 4,000,000 blacks in America were in slavery, and since the approximately 250,000 "free Negroes" in these states were highly circumscribed in their social interaction with whites, the early land-grant colleges became white bastions, barring blacks from admission by both custom and law. For example, when a black student entered the University of South Carolina (then South Carolina College) in Columbia in 1873, some of the white faculty resigned and a number of white students withdrew. With a sharp decrease in both faculty and students, the college was closed in 1877 rather than have a mixed faculty and student body. Their black and northern white faculty members were dismissed and the college remained closed until 1880.[5] So even though Morrill had hoped that these new colleges would reach the great majority of Americans and thereby democratize education, he obviously had given little or no thought to the plight of black Americans in Southern and border states.

Although no direct provisions were made for blacks in the original Morrill Act of 1862, four black land-grant schools eventually received funds under the Act. They were Alcorn State University in Mississippi, Claflin University in South Carolina, Hampton University in Virginia, and, at a much later date, Kentucky State University in Kentucky. A brief overview of the early beginnings of each of those institutions will follow.

Alcorn State University, the first black land-grant college, emerged from the educational ruins of Oakland College, a Presbyterian school for white males which was forced to close during the Civil War for lack of students. The property was then sold to the state for the education of blacks, renamed Alcorn University in honor of the current governor, James L. Alcorn, and designated in 1871 as a recipient of funds under the original Morrill Act of 1862, with Hiram R. Revels as the first president. On September 21, 1871, the state of Mississippi received a total of 209,920 acres of public land which was sold at 90 cents per acre, bringing a total of $188,928 for the support of land-grant institutions. Since blacks, who were just out of slavery, did not have a state-supported institution of higher learning, the reconstructed state legislature under Governor Alcorn initially allocated three-fifths or $113,351 of these funds to Alcorn University and two-fifths or $77,577 to the University of Mississippi. Alcorn's amount was diminished immediately by the use of $10,500 to purchase part of the university tract.[6]

At the outset, Alcorn was supported exceedingly well, receiving three-fifths of the land-grant funds plus liberal support from the state legislature. However, Alcorn was accused of being unable to use all the funds provided for it, while student strikes and internal disturbances reduced its effectiveness as an emerging educational institution. Governor Adelbert Ame, for political reasons, removed President Revels from his position in 1874. This act led to a student revolt and sixty students withdrew from the University. Some historians have maintained that

Alcorn was the first black college to have a student revolt. After a committee's investigation supported the governor's charges of mismanagement against the president and other officials, the temporary removal from office stipulated "that the president should be required to teach one class; that the office of superintendent and treasurer should be abolished; and the annual appropriations for its support reduced from $50,000 a year to $15,000 a year."[7] The legislature, in which "Jim Crow" attitudes were rapidly developing, accepted the committee's report and showed its displeasure with the university by cutting the annual appropriations for the institution from $50,000 to $15,000. Under the original Act, the school was to receive $50,000 for ten years.[8]

Under the leadership of Revels, the first black to hold membership in the United States Senate, Alcorn made feeble attempts to implement land-grant functions. The course of study for 1872-1873 was basically classical and did not list any agricultural courses at all. All students in the college preparatory department were required to take four years of Latin and Greek. The College Catalog did make reference to a farm of 235 acres upon which cotton and corn were the chief crops grown. Also there was a peach, pear and apple orchard consisting of 500 trees. The Catalog further stated: "It is the intention as it is the duty of the institution to make the farm a model of agricultural beauty and fertility and to develop a high order of scientific as well as practical agriculture."[9]

Despite the bitter political climate that existed in Mississippi and despite the conflict over the mission of the institution, in 1878 Alcorn University was reorganized by legislative act under the title "Alcorn Agricultural and Mechanical College of the State of Mississippi." It was to receive one-half of the income of land-grant funds, while the other half went to institutions for white students. The act which changed the name of Alcorn University also delineated the land-grant functions:

> The establishment and maintenance of a first-class institution at which the youth of the state of Mississippi may acquire a common school education and a scientific and practical knowledge of agriculture, horticulture, and mechanic arts, also the proper growth and care of stock, without, however, excluding other scientific and classical studies, including military tactics.[10]

Although the language establishing the new college was an accurate statement of the land-grant idea of Senator Justin S. Morrill in the original Act of 1862, it was made clear by subsequent political actions that the state did not intend to create a "first-class" institution for its black citizens. The legislature did not restore the $50,000 per annum promised under the original charter. In addition to granting one-half of the interest of agricultural land scrip to Alcorn, the reorganization in 1877 resulted in the creation of an agriculture course for both high school and college, thus diminishing funds available for collegiate training.[11]

Upon the resignation of President Revels from his second stint as president of Alcorn, John D. Burrus, a graduate of Fisk University with a master's degree from Dartmouth University, became president. While Burrus strongly emphasized agriculture to the legislature, the faculty he recruited for Alcorn during those early years were trained primarily in the liberal arts at Fisk University. President Burrus maintained that since Mississippi was an agricultural state, agricultural and mechanical arts programs in the college needed improving. Theoretical and practical agriculture should be harmonized. Since most black farmers in Mississippi were then unschooled or virtually illiterate, books, papers and circular literature would do them little or no good. He contended that "The agriculture instructors wanted the school to make provisions for more brains to be put behind the plows, hoes, and wagons that were manipulated by the colored citizens of the state so that they might keep abreast of the times."[12]

Yet, with the state cutting appropriations and federal funds, it was difficult for the president to effect any changes in agriculture at Alcorn. For example, in 1886, Alcorn received just $5,678.75 from land scrip or Morrill funds. However, after a strong petition, Burrus was able to get the state to restore $5,000 out of state funds. Despite the barebones budget, Alcorn made small but notable strides in agriculture. At the state fair in Vicksburg in 1886, the best display of written examination papers and the best display of farm products were submitted by students from Alcorn.

Agriculture was poorly developed as a curriculum at Alcorn, even though the school started receiving Morrill funds earlier than did other black colleges. The mechanical arts component at the school was not even started until after 1890. Since virtually all students were at the pre-collegiate level, Alcorn, like most other black educational institutions, concentrated on the rudiments of education, the liberal arts, and teacher education. The Hatch Experiment Station Act in 1887, which provided for the establishment of experiment stations in the several states under the control of white institutions, made available a veritable flood of free literature on scientific agriculture and other sciences for the college and its professors. However, it was not until after 1890 that Alcorn developed distinct agricultural and mechanical programs.

Additional federal funds came to Alcorn's coffers when the provisions of the Second Morrill Act were accepted by the state on March 30, 1892. The legislature stipulated that "the funds received under the aforesaid act shall be divided between aforesaid agricultural colleges for white and colored in the proportion that the whole number of educable children in the State of each race bears to the whole number of educable children of both races."[13]

Using the funds made available by the Morrill Act of 1890, notable changes were made in the college curriculum. In 1893, a mechanical arts department was started which gave students an opportunity for training in blacksmithing, painting, shoe-making, and carpentry. In defense of his support of a curriculum which reflected Booker T. Washington's philosophy of education for blacks, Burrus contended: "A first-class farmer, carpenter, or workman of any trade or profession would be more likely to prove an industrious, sober and worthy citizen than an unskilled laborer."[14] Unfortunately for President Burrus, a legislative investigation of alleged "charges and counter charges" led to his resignation before any significant influence of the new program could be discerned.

With a new emphasis on agriculture and mechanical arts President William H. Lanier (1899-1905) was able to get considerable support from the board of trustees, the governor, and the state legislature. In 1899, the board of trustees of Alcorn wrote: "Believing that the future of the Negro in this country is almost entirely an industrial future, we have sought to enlarge facilities for improving efficiency and increasing his productive capacity as a skilled agriculturist and mechanic. Better equipment has been provided in all these departments."[15] Indeed, equipment and supplies were improved and agriculture made considerable gains. In 1900, the farm report showed a decided move toward cattle industry with 35 Devon cattle and 60 Poland China pigs. Likewise, blacksmithing, painting, and carpentry realized increased funding with the college distributing $69,117.40 between 1899 and 1900.

Beginning in 1907, the state of Mississippi received an additional federal appropriation of $5,000 under the Morrill-Nelson Act of 1907. Over the next five years this amount increased to $25,000 per year, and Alcorn received a little more than half of the amount allocated to the state. Increasingly, the Board of Trustees emphasized that blacks must be trained along agricultural and mechanical lines. All students enrolled at Alcorn were required to learn a trade; hence half a day was given over to classroom instruction and the other half to practical experiences in the field and shop. In a study of Alcorn's early years, it is difficult to draw a clear distinction between collegiate and secondary training. In 1909, there were seventy-two students taking courses in agriculture, and twelve graduated between 1907 and 1909. In 1914, the number of agricultural faculty members had increased to five under the leadership of Professor Preston S. Bowles. The total enrollment in college agricultural courses was twenty-four, and in pre-college, sixty-one; there were thirty-one students in horticulture on the college level.[16]

Although Alcorn announced that collegiate instruction and degrees were given from the beginning in 1871, the evidence does not indicate sound four-year college programs during the early years. There were efforts on the part of college administrators to build sound bachelor's degree programs in the early 1920's. The College Catalog for 1926 showed a strong bachelor's program which required that a student complete 180 hours for a college degree, and twenty units to graduate from high school. The 1926-1927 Catalog showed the college offering a four-year college course in agriculture and a four-year course in agricultural education, both leading to the bachelor of science degree. Some records show that the first degree in agriculture was given in 1924. Also, under the Smith-Lever Act of 1914, the college had begun to take agriculture and home economics training to citizens in outlying counties. Alcorn could point to a well-developed extension department created by act of the state legislature, and teacher training centers for improving the quality of instruction among teachers of vocational agriculture and training teachers for part-time and evening classes under provisions of the Smith-Hughes Act of 1917. Another step forward was made when, with a General Education Board Grant of $100,000 and a matching grant of $200,000 by the state, President Levi J. Rowan was able to erect at Alcorn the $300,000 Bowles Science and Agricultural Building. In the 1927-29 biennial report the State Superintendent of Education wrote: "Mississippi is now definitely committed to a program of training for the Negroes . . . The authorities of the institution are proud of their new building and are striving in every way possible to render good and acceptable service to the state."[17] Alcorn was on its way to becoming a first-rate land-grant institution. In 1934, Alcorn received accreditation by the Southern Association of College and Schools, and was the only public college in Mississippi opened to blacks until 1940.[17]

From the very beginning, Hampton (Institute) University, which was founded in 1868 by Samuel Chapman Armstrong, incorporated the land-grant idea into its curriculum. Unlike the other colleges which emphasized liberal arts at the outset, Hampton, beginning with elementary studies, placed emphasis upon agriculture, trades, and teacher training for work at the lower levels, followed by a gradual raising of teacher training courses to higher levels. Armstrong, who had grown up among native Hawaiians and who believed blacks to be similar in all respects, began implementing his paternalistic educational design at Hampton. It was his desire to make Hampton into (1) a means of promoting self-reliance and independence, while relieving labor from the depravity which slavery had placed upon it; (2) a means whereby students should become suited to teach and lead and earn by their own work; and (3) a means whereby the student would learn in school how to support himself after graduation by working with his hands and brains.[18] His ideal of the new school's mission can best be stated in his own words. Its function should be to

> train selected Negro Youth who should go out to teach and lead their people, first by example, by getting land and homes; to give them not a dollar that they could earn themselves; to teach respect for labor; to replace stupid drudgery with skilled hands; and to these ends to build up an industrial system for the sake, not only of self-respect and intelligent labor but also for the sake of character.[19]

When Hampton was incorporated and placed under an independent board of trustees in 1870, the charter specified that the purposes of the Institute were

> the instruction of youth in the various common-school, academic and collegiate branches, the best method of teaching the same, and the best modes of practical industry in its application to agriculture and mechanical arts; and for carrying out these purposes, the said trustees may establish any department or school in the said institution.[20]

Hampton's pragmatic approach to education may be further seen in Armstrong's proclamation that "in the school room the students have their opportunity to learn the three great lessons of life—how to live, how to labor, and how to teach others."[21]

Although Hampton in its early years stressed industrial education and instruction at the sub-collegiate level, its charter shows that from the very beginning the founders saw the possibility of expanding the curriculum to include collegiate courses. Given Hampton's philosophy of education, as revealed in its charter, it is not strange that the institution was selected in 1872 as the site of the black land-grant college of Virginia, becoming the second black college to receive support under the Morrill Act of 1862. The state of Virginia sold 300,000 acres of scrip from the federal government for $285,000 and divided the income between Hampton and the white land-grant college of the state. The General Assembly of Virginia granted one-third of the Morrill Act funds to Hampton, beginning with an annual appropriation of $10,000. Hampton's financial status improved in 1893 when the general assembly of the State of Virginia accepted the funds made available under the Second Morrill Act, providing "one-third thereof to the Hampton Normal and Agricultural Institute, and two thirds to the Virginia Agricultural and Mechanical College and Polytechnic Institute."[22] Hampton continued as the Negro land-grant college of Virginia from 1872 to 1920—a period of forty-eight years—when the fund was transferred to Virginia State (College) University at Petersburg.[23]

On May 11, 1893, one year after Hampton began receiving funds under the Second Morrill Act, General Armstrong died. He had firmly established an educational program which emphasized agricultural and mechanical arts at the expense of literary training. Shortly before his death he had stated that "What the colored people need is not Greek culture of the head, not chiefly a knowledge of history and literature, but enough training of the brain to make them think well, control their lower desires, and love their fellow-men, but mainly industrial training, steadiness, and mastery of trades, loving skillful use of hands and eyes and voice."[24] The course of study in 1893 included courses in business, agriculture, trades and kindergarten and public school teaching. Instruction was given in thirteen trades, each trade having a separate shop. In addition to the model farm, poultry yards, dairy, orchards, and experiment garden in the department of agriculture, there was a well-stocked farm of seven hundred acres in practical operation. In domestic science, instruction was given in such pursuits as homemaking, sewing, dressmaking, laundering, cooking, and housekeeping.[25]

Given Armstrong's paternalistic concept of education for blacks, the central theme at Hampton was that agricultural, mechanical, scientific or academic knowledge must be used directly in service to others. To this end, every boy and girl was trained to be of service to the community—at poorhouses, jails, Sunday schools, churches of the neighborhood or wherever they could labor for others. Although most training was offered in grammar and high school grades, the Normal Department gave instruction in modern methods of teaching in the classroom. By 1917, under the leadership of the second president, Hollis Burke Frissell, the educational program was expanded and upgraded. Francis G. Peabody wrote of Hampton in 1917:

> Agriculture with its diversified interests of production, stock raising, and dairy-farming; home economics with its varied industries of cooking, laundry work, millinery, and household care; business administration with its contributory classes in booking and commercial law; technical training in a constantly increasing number of trades, from elementary carpentering to motor-repairing . . . have not only been multiplied and strengthened, but have been brought into intimate correlation with academic study, and made not only forms of production, but ways of instruction in which work is subordinated to the worker and education for life.[26]

While Hampton, with its "Education for Life" concept, did not remain the land-grant college for blacks in Virginia after 1920, it must be conceded that it set a developmental pattern in education which, in general, black land-grant colleges have followed. Its most famous graduate was Booker T. Washington, who founded Tuskegee Institute in 1881 and there adapted and expanded the philosophy of education which he learned from his life at Hampton and his contacts with Armstrong.[27] Writers often quote Washington as saying: "All that I have been worth . . . I owe to Hampton." Conversely, General Armstrong once said that "If Hampton had done nothing else than to graduate Booker T. Washington, it would have paid for itself."[28] Fair to say that few ideas have been more extensively copied in modern educational practice than those early expressed at Hampton and later extended and expanded by its educational godchild, Tuskegee. The impact of these two institutions on educational programs in our black land-grant colleges has been immeasurable.

The land-grant concept of education for blacks found its way into South Carolina through Claflin University, a college which was founded by the South Carolina Methodist Conference in 1869. Its primary mission was to train prospective and in-service teachers for South Carolina schools as well as ministers for the churches. However, as state officials attempted to comply with the educational provisions of the new constitution of 1868, which called for equal educational opportunities for blacks and whites, land-grant functions were thrust upon Claflin University in the hostile and volatile political conflict between "radical reconstructionists" and "home rule" advocates. In 1872, by an act of the state legislature, it was provided:

> That a college and Institute of Mechanical Arts be established at Orangeburg, in connection with Claflin University, to be called the South Carolina Agricultural College and Mechanics' Institute. In accordance with the provisions of the Act of Congress passed July 2, 1862 and all amendatory thereto. The design of the Institute shall be to afford instruction in practical and theoretical agriculture, mechanic arts and military tactics and training.[29]

The land-grant functions were placed at Claflin because there were no funds available for purchasing land for an experimental farm. Maintaining that the Morrill Act money was not available for dormitories, classrooms and other buildings at a new institution, the state turned to an existing private institution. Even though Claflin did not have an appropriate farm, the legislature forbade the board of trustees to spend more than one tenth of the funds to which the state was entitled under the Act of Congress in that funds were for operating purposes only. The new Agricultural College and Mechanics' Institute at Claflin University in 1872-1873 received $5,754.00 from interest on the sale of the land.[30]

With meager funds for development, growth at the new college was slow. Departments were established in agriculture, mechanical drawing, masonry, woodworking, iron working, printing, fancywork and cooking. While Claflin and the Institute were listed as distinct and separate institutions, all students were required to take one or more of the industrial courses during each year of training. In 1883, the John F. Slater Fund enabled Claflin to build and equip a machine shop and a carpentry shop, and improve practical instruction at the experimental farm. Additional funds came to Claflin after the state legislature accepted the provisions of the Second Morrill Act on December 24, 1890. The land-scrip fund, which was to be a perpetual and undiminishing fund, amounted to $95,000. The legislature specifically stated that: "All sums which shall be received by the State . . . under the provisions of the Act of Congress approved August 30, 1890, shall be equally divided between the Colored Normal, Industrial, Agricultural and Mechanical College . . . and the Clemson Agricultural College . . ."[30]

Despite the additional income, agricultural offerings at Claflin were minimal prior to 1895. There existed a four-year course supposedly leading to a bachelor's degree in agriculture; however, only three of the classes dealt with the subject—farm labor, soil analysis, and "Chemistry in relation to Agriculture,"—as reported by the Catalog of 1879-1880. In the 1880's, agriculture, with fifty men enrolled, was taught by one man, James B. Kelly. An analysis of the program indicates that most work offered was at the secondary or normal school level. A 116-acre farm was designated as the training facility for the students, but the university was so desperate for funds that very little of this land was used for experimental purposes. In 1887, students raised 1,500 bushels of corn, 600 bushels of sweet potatoes, 300 bushels of oats, 50 bushels of clay peas, 25 bushels of grapes, and 2,000 quarts of milk which were consumed by the university. This pattern of practical use above experimental purposes was true of land-grant colleges generally during the 1880's. In 1893 there were fifty-five students in agriculture caring for seven heads of horses and mules, seven heads of Holstein-Friesian cattle, seven heads of Jersey cattle, several hogs and fowl. Very few of Claflin's students, most of whom were in teacher training, completed the Agricultural program during the first twenty years.[32] The land-grant educational opportunities for blacks were transferred from Claflin University to the newly-established Colored Normal, Industrial, Agricultural and Mechanical College of South Carolina in Orangeburg in 1896, marking the beginning of South Carolina State College as the black land-grant college for the state.

Kentucky State University, established by an act of the general assembly in 1886 as the State Normal School for Colored Persons (SNSCP), became the second of two land-grant institutions in the state of Kentucky. The institution began its existence on May 18, 1886 on a twenty-five-acre site of tillable land and meadow located one and one-half miles from Frankfort. Under the leadership of the first president, John H. Jackson, the holder of a master's degree from Berea College, and three teachers, it began offering training for fifty-five students on October 11, 1887. Tuition for black state residents was free provided they met the qualifications and signed an affidavit to teach in public schools twice the length of time they remained at the school. From the very beginning, SNSCP had as its primary mission "the preparation of teachers for teaching in the public schools of Kentucky."[33] Although the college did not immediately receive 1862 land-grant funds, subsequent legislation provided that it receive a proportionate share. By a legislative act of May 22, 1897 (Sec. 2), it was stipulated that "it shall be the duty of the auditor to regularly draw his warrant upon the treasurer . . . for the sum of four thousand nine hundred and fifty dollars ($4,950.00) to pay said interest, in the following proportions to wit: "Six hundred and twenty-seven and seventy-five hundredths dollars ($627.75) to the treasurer of the State Normal School for Colored Persons, and four thousand three hundred and twenty-two and twenty-five hundredths dollars ($4,322.25) to the treasurer of the Agricultural and Mechanical College of Kentucky (now University of Kentucky)."[34]

The State Normal School for Colored Persons did not receive its share of the 1862 Morrill Act funds until 1897. Since it was purely a teacher training institution, the focus was on classical and pedagogical courses. However, beginning in 1890, SNSCP established the department of agricultural, mechanical, and domestic economy in preparation for funds from the Second Morrill Act.

The state legislature finally accepted the terms of the Second Morrill Act on January 13, 1893. On May 22, 1893, a further provision stated that the Kentucky Normal and Industrial Institute for Persons of Color "shall be entitled to receive an equitable division of moneys appropriated by the State of Kentucky by an act of Congress approved August 30, 1890."[35] The moneys were to be divided on the basis of the ratio of black and white children, with the University of Kentucky receiving 85.5 percent and Kentucky State receiving 14.5 percent.

In 1902 the legislature passed a law which changed the name from SNSCP to Kentucky Normal and Industrial Institute for Colored Persons (KNII) and increased the annual state support of $5,000. With those funds plus funds from the first and second Morrill Acts, KNII was able to develop stronger industrial and agricultural programs. So in 1903, "KNII students had the choice of carpentry, printing, sewing, cooking, agriculture, laundry, broom-making and blacksmithing. With 111 of the 200 students being female, the sewing class enrolled over 50 percent of the female students. The largest male enrollments were found in the agricultural classes. Forty-three males and thirty-four females participated in the normal (teacher preparation) curriculum."[36] One year later, the farm, which was run mostly by student labor, showed the following: "24 tons clover hay, 8 tons of alfalfa hay, 16 tons timoth hay, 20 tons wheat straw, 604 bushels Irish potatoes, 200 bushels sweet potatoes, 100 gallons sorghum, 3,600 pounds meat."[37] These figures showed that progress was being made in the agricultural development of the institution.

Despite the emphasis on agriculture and industrial arts, the institution was primarily an elementary and secondary school with normal instruction until 1929. However, under the leadership of President Rufus Ballard Atwood, Kentucky State blossomed into a full-fledged four-year institution with secondary work being phased out in 1931. A bachelor's degree program in agriculture was started in 1931 with other degree programs to follow. In 1938, the institution had been strengthened by the transfer of academic and liberal arts courses from the West Kentucky

Vocational School for Colored Persons, and its name changed to Kentucky State College for Negroes, thus becoming the only state-supported college for blacks in Kentucky. Atwood, who held a bachelor of science degree in agriculture from Iowa State College, not only developed a strong agricultural, home economics and mechanical arts curriculum at KSU, but became one of the foremost spokesmen for land-grant colleges in the Conference of Presidents of Negro land-grant Colleges.

Of the four black institutions which received 1862 funds, two were of state origin (Alcorn and Kentucky State) and two were of private origin (Hampton and Claflin). Mississippi provided a greater portion of its funds to its black institution initially, but these funds were cut as more conservative political forces regained power in the state. Although Alcorn had authority to offer a degree program from its inception, its faculty and resources indicated an inability to deliver college graduates. Like the other black institutions, it was primarily an elementary, secondary and normal school until the 1920's. Except at Hampton where the initial mission was focused on combining teaching with agricultural, mechanical and industrial arts, agriculture was not an initial part of the academic programs. Kentucky did not begin receiving funds until after 1890 and then its proportionate share was small. The impact of 1862 Morrill Act funds upon black education in the South was almost negligible; thus, a second Morrill Act was necessary to bring blacks from a position of virtual exclusion to inclusion in the receipt of these federal funds.

CHAPTER TWO

From Exclusion to Inclusion:

The Impact Of The Morrill Act of 1890 (To 1940)

ALTHOUGH the Morrill Act of 1862 disregarded all distinctions of race, creed and sex in its pragmatic venture to democratize higher education, Southern customs, traditions, and laws prevented blacks from becoming full partners in pursuit of the new education. With the exceptions of Alcorn, Hampton, and Claflin, no black institution received 1862 funds prior to 1890. Considering the previous condition of blacks in Southern society, it is unfortunate that the original Act did not provide for a division of federal funds along racial lines. As a result of this omission, the federal funds received were used, in most cases, to develop white institutions from which blacks were excluded. During this twenty-eight-year period of almost complete exclusion of blacks from the benefits of 1862 Morrill funds, a more systematic legal basis for racial segregation was being developed.

During the final quarter of the nineteenth century, congressional power behind blacks' strides toward freedom was almost completely nullified. The liberties guaranteed them by the Fourteenth Amendment were eroded by adverse decisions of the Supreme Court, and their entire lifestyle in Southern and border states was subsequently curtailed by a system of racial segregation sanctioned by legal authority at both the federal and state levels. The Compromise of 1877 was in effect an indication of national capitulation to racism, for the withdrawal of troops and direct federal authority

> left the freedman in the custody of the conservative Redeemers upon their pledge that they would protect him in his constitutional rights. But these pledges were forgotten or violated and the South veered toward proscription and extremism, Northern opinion shifted to the right, keeping pace with the South, conceding point after point, so that at no time were the sections very far apart on race policy.[1]

Significant among the cases which eroded the civil rights gains of blacks during this quarter of the century were the *Slaughter House* cases of 1873.[2] In these cases, the Court rendered the privileges and immunities clauses of the Fourteenth Amendment almost meaningless by maintaining that it was never the purpose of the Amendment to federalize the privileges and immunities of state citizenship and to transfer their custody to the Federal courts. Thus the precedent was set for a dualistic concept of citizenship which separated national citizenship from state citizenship. In the case of *U. S. v. Cruikshank*[3] in 1876, the Court refused to punish private individuals who had violently broken up a meeting of black citizens gathered to discuss local elections in Louisiana. The Court held that interference by private individuals could not be a crime when such a meeting was held for some purposes connected with national citizenship. Two years later in 1878, the Supreme Court, in the case of *Hall v. DeCuir*[4] ruled in favor of segregation in interstate commerce, thus nullifying a statute of 1869 prohibiting segregation on public carriers.

With the decisions in these and other significant cases, the attrition of black people's civil liberties continued almost unabated on the national, regional, state and local levels. Another major blow against blacks was struck when the Supreme Court's decision in the *Civil Rights Cases* of 1883[5] eliminated all legal defenses that had been available to blacks in their fight against discrimination. These decisions completely nullified those provisions of the civil rights act which prohibited discrimination in places of public accommodation and imposed penalties directly against persons guilty of such discrimination, regardless of whether the state was involved. The ultimate in freedom to discriminate against blacks was afforded by the Court's decision in the case of *Plessy v. Ferguson* in 1896, which gave sanction to the separate-but-equal doctrine. Indicating a willingness to leave matters of social equality to the people of the states themselves, the Court declared: "If the civil and political rights of both races be equal, one cannot be inferior to the other civilly or politically. If one race be inferior to the other socially, the Constitution of the United States cannot put them on the same plane."[6]

The decisions of the Court in *Plessy v. Ferguson* and in previously mentioned cases gave sanction to hostile, oppressive, and discriminatory acts against blacks by the dominant group and actually became the blueprint for a white and black caste system which would permeate all social institutions in the South. So with virtual impunity, in state after state, the chain of legal containment was lengthened to restrict and circumscribe black people's rights.

Since voting rights represented potential political power, efforts were made systematically to destroy black political influence. Quarles, in his little book *The Negro in the Making of America*, writes: "The Court's rulings encouraged the White South to launch a final bloodless offensive to relegate the Negro to his proper political and social sphere."[7] During 1890, the year that the Second Morrill Act was passed, Mississippi established in its constitution three conditions for voting: a residence requirement, the payment of a poll tax, and the ability to read or to interpret a section of the state constitution. In 1881, the Arkansas legislature had already passed a law providing for alternate admission procedures for whites and blacks in certain voting precincts. South Carolina adopted a list of crimes such as larceny (which had a high incidence among blacks) which disfranchised offenders. Legal maneuvers and subterfuge such as grandfather clauses, good character tests, literacy tests, and white primaries robbed blacks of their political power, thus assuring a move away from universal education toward "Negro Education" or education for blacks. Utilizing the momentum of the white primary which originated in Texas in 1895, and capitalizing on the impact of Booker T. Washington's "Atlanta Address," in Florida, Superintendent William N. Sheats brought the stiffest kind of segregation requirement to Florida's schools in the form of the so-called "Sheats Law" of 1895. This reactionary law "prohibited the teaching or boarding in the same class or building of white and colored students in public or private institutions."[8] This law was carried to the courts and invalidated;

nevertheless, its negative effects were manifested throughout the public school system in the state.

With most blacks becoming disfranchised and increasingly powerless in the South, and with the re-establishment of home rule in most states, many white officials and leaders began to speak openly against higher education for blacks. In 1883, President John Houston Burrus of Alcorn reported that "Nearly half of the members of the Board of Trustees were against higher education for Negroes."[9] In Florida, the powerful editor of the *Daily Herald* in Jacksonville, John Temple Graves, lambasted the members of the convention of 1885 as "school cranks who were trying to confiscate property of the state to educate the Negro with."[10] In Louisiana in 1881, the editor of the *Louisiana Journal of Education* opposed the establishment of Southern University by stating: "It strikes us as an effort to reverse the ordinary methods of proceeding and to construct a building from the top instead of from the foundation."[11] In South Carolina, Ben "Pitchfork" Tillman not only wanted to deny blacks an education, but openly admitted his opposition to any semblance of equality for blacks. Of black disfranchisement he said: "We have done our level best; we have scratched our heads to find out how we could eliminate the last one of them. We stuffed the ballot boxes. We shot them. WE ARE NOT ASHAMED OF IT."[12]

In a social and political framework where the worth of blacks was increasingly being denied, where disfranchisement was making of blacks a powerless group, and where white leaders were openly questioning the need for higher education for blacks while supporting the development of white institutions, federal intervention was essential to provide land-grant education to black people. Despite the expressed opposition by many white leaders, by 1890 there were many strong advocates of black education. The Second Morill Act, passed by Congress on August 30, 1890, reflected this changing sentiment. The process of enacting the Morrill Act was not easy. According to Eddy, beginning in 1872, Morrill presented the bill which was to become the Second Morrill Act of 1890 twelve times before it became law.[13] The fact that the Act stated that funds should be "equitably divided" between white and black colleges brought stiff opposition from white Southern congressmen and their allies. It provided for the more complete endowment and maintenance of colleges for the benefit of agriculture and the mechanical arts established in accordance with the Act of July 2, 1862 and provided "further funds to be paid only to instruction in agriculture, the mechanical arts, the English language, and the various branches of mathematics, physical, natural, and economic science, with special reference to their applications in the industries of life, and to the facilities for such instruction."[14]

In an effort to remove the possibility of inequality, racial discrimination was forbidden in the Second Morrill Act of 1890. The Act specifically provided that the land-grant funds be equitably divided where separate schools for the two races were maintained. The text of the Act making this provision is shown below:

> Provided, That no money shall be paid out under this act to any State or Territory for the support and maintenance of a college where a distinction of race or color is made in the admission of students, but the establishment and maintenance of such colleges separately for white and colored students shall be held to be a compliance with the provisions of this act if the funds received in such State or Territory be equitably divided as hereinafter set forth: Provided, That in any State in which there has been one college established in pursuance of the act of July second, eighteen hundred and sixty-two, and also in which an educational institution of like character has been established, or may be hereafter established, and is now aided by such a state from its own revenue, for the education of colored students in agriculture and the mechanic arts, however named or styled, or whether or not it has received money heretofore under the act to which this act is an amendment, the legislature of such a State may propose and report to the Secretary of the Interior a just and equitable division of the fund to be received under this act between one college for white students and one institution for colored students established as aforesaid, which shall be divided into two parts and paid accordingly, and thereupon such institution for colored students shall be entitled to the benefits of this act and subject to its provisions, as much as it would have been if it had been included under the act of eighteen hundred and sixty-two, and the fulfillment of the foregoing provisions shall be taken as a compliance with the provision in reference to separate colleges for white and colored students.[15]

The above statute did not demand the creation of black institutions outright, but it provided for the loss of funds in those states in which blacks were not receiving land-grant education. Since racial segregation was a way of life in the South, passage of this act necessitated the building or designation of a black institution in almost every Southern state to be the recipient of funds "for the benefit of agriculture and the mechanic arts established under the provisions of the original 1862 Morrill Act."[16]

A brief analysis of the 1890 Morrill Act shows that its designers tried to be all things to all people—to walk a political tightrope between the national conscience for greater inclusion of blacks in land-grant education and the fait accompli of segregation in educational practices in Southern and border states. So while there was a definite injunction against discrimination in the allocation and use of federal funds, there was also a provision which enabled the states to freely establish separate land-grant institutions for white and black citizens. Thus, in this case, "separate-but-equal" patterns of education had legal sanction at the federal level six years before the *Plessy v. Ferguson* decision openly declared that the concept of "equitability" could be achieved through separate but equal systems.

At the beginning, land-grant colleges were not appealing to most black Southerners because their history of exploitation during slavery and slavery's aftermath had taken the dignity and respect out of agricultural and mechanical occupational pursuits. Having to depend on private schools sponsored by denominational and philanthropic groups for their early education, high school, and normal instruction, blacks were given mostly cultural instruction emphasizing the liberal arts and sciences. During the period immediately preceding and following the Civil War, eighteen colleges of a philanthropic and missionary character were established; and between 1870 and 1890, thirteen additional colleges were founded by Southern black church organizations. With the exception of Hampton Institute and Tuskegee Institute, which emphasized agriculture and mechanical arts, all were devoted to the old type of higher learning: the classics, theology, letters, and humanities.[17]

That a broad comprehensive approach to education was needed may be seen in part by the fact that an extremely high rate of illiteracy existed among blacks in the states where black land-grant colleges were subsequently developed. Less than half of the South's black population ten years of age and older could read or write in 1890, but fewer than 10 percent of the children of black parents were attending public schools. As late as 1915, there were but sixty-four public high schools for blacks in Southern states, and only forty-five of them offered a four-year curriculum. The secondary enrollment was 20,234, with 11,527 black students in private schools and only 8,707 in public schools. So black people in the South lacked an adequate system of public education, and the shortage of secondary graduates forced the 1890 land-grant institutions to focus first on elementary and secondary work. In 1916 the total enrollment in land-grant colleges for blacks was 4,875 and 2,595 were of elementary, 2,268 secondary, and 12 of collegiate grade.

The twelve students of collegiate grade were enrolled at Florida A&M University. Some writers feel that the designation "land-grant high school" would have been more appropriate than land-grant college. It was not until 1930 that students enrolled in the collegiate grades exceeded those in elementary and secondary grades.[18] While more college students were registered in black land-grant colleges beginning in 1930, it should be noted that several of the colleges did not offer four-year degrees until the late 1930's or early 1940's.

With the exception of Alcorn, where the Mississippi Legislature passed an "act to establish and organize agricultural and mechanical colleges and to regulate the government of the same," the 1890 Morrill Act was the instrument for the establishment or designation of all of the black land-grant institutions. Almost immediately upon the enactment of the Second Morrill Act in 1890, four of the Southern states —Georgia, Oklahoma, South Carolina and Virginia—accepted terms for black land-grant colleges. Nine other states—Alabama, Arkansas, Delaware, Florida, Missouri, North Carolina, Tennessee, Texas, and West Virginia—accepted the terms in 1891; Maryland and Mississippi in 1892; and Kentucky and Louisiana in 1893.[19] While the provisions of the Second Morrill Act were accepted in Tennessee on February 2, 1891, it did not establish a separate land-grant college until 1912. However, within a three-year period after 1890, all Southern states, along with Delaware and West Virginia, had accepted the provisions of the Act, and in doing so, had agreed to provide a land-grant education for black citizens through separate black colleges. The following table will show the years in which black colleges received First and Second Morrill Act funds and the dates of establishment for current land-grant institutions.

As can be observed from Table I, there was no uniform date or method of acceptance of the 1890 Morrill Act funds by the various states; nor was there any uniformity in the actual establishment of land-grant colleges. In fact, the acceptance by the states of federal funds did not imply that a black land-grant institution would be established or designated immediately, nor was there general agreement on how blacks would share in Morrill Act funds. Thus, it is essential to provide a brief explanation of the manner by which each state established or designated its land-grant institution.

Lincoln University, the oldest of the historically black institutions to subsequently receive land-grant status, "was established in 1866 as the Lincoln Institute by officers and men of the 62nd and 65th Regiments of the U. S. Colored Infantry as an institution to serve the needs of the newly freed Negro."[21] These regiments, which were stationed at Fort McIntosh but were composed principally of Missourians, established the new school with the following stipulations: "(1) The institution shall be designed for the special benefit of the freed blacks. (2) It shall be located in the State of Missouri. (3) Its fundamental aim shall be to combine study and labor."[22] Members of the 62nd U. S. Colored Infantry contributed $5,000 to open the school and they appealed for help to the 65th U. S. Colored Infantry which gave $1,324.50. With these funds, Lincoln Institute opened its doors to its first class in an old building in Jefferson City, with Lieutenant Richard B. Foster as the first president.

The creation of Lincoln University is an excellent example of the achievements of blacks who possessed an enthusiastic desire for learning after the Civil War. The school was moved to its present site in 1869 and one year later became the recipient of funds from the state for the training of teachers. Leading black citizens unsuccessfully petitioned the legislature of Missouri in January 1870 to make the institution a state normal school and designate it as a recipient of federal funds under

TABLE I:

CHART SHOWING SIGNIFICANT FEATURES OF BLACK LAND-GRANT INSTITUTIONS

NAME AND LOCATION	YEAR FOUNDED	YEAR COLLEGES RECEIVED FUNDS UNDER MORRILL ACT OF 1862	DATE STATES ACCEPTED TERMS OF MORRILL ACT OF 1890	STANDARD FOUR-YEAR COLLEGE PROGRAM INITIATED	GRADUATE PROGRAM INITIATED	FIRST REGIONAL ACCREDITATION RECEIVED
Alabama A&M University Normal, AL	1875		March 13, 1981	1939	1958	1963
University of Arkansas – Pine Bluff Pine Bluff, AR	1873		April 9, 1891	1929		1933
Delaware State College Dover, DE	1891		February 12, 1891	1932	1981	1949
Florida A&M University Tallahasee, FL	1887		June 8, 1891	1909	1945	1931
Fort Valley State College* Fort Valley, GA	1895		November 26, 1980	1945	1957	1957
Kentucky State University Frankfort, KY	1886	1897	January 13, 1893	1929	1972	1939
Southern University Baton Rouge, LA	1880		January 23, 1893	1922	1956	1937
University of Maryland – Eastern Shore Princess Anne, MD	1886		March 15, 1892	1936		1953
Alcorn State University Lorman, MS	1871	1871	March 20, 1892	1871	1975	1934
Lincoln University Jefferson City, MO	1886		March 13, 1981	1924	1940	1934
North Carolina A&T University Greensboro, NC	1891		March 6, 1891	1925	1939	1931
Langston University Langston, OK	1897		October 27, 1890		1989	1948
South Carolina State College** Orangeburg, SC	1896	1872	December 24, 1890	1924	1946	1932
Tennessee State University Nashville, TN	1912		February 26, 1891	1922	1941	1946
Prairie View A&M University Prairie View, TX	1878		March 14, 1891	1919	1937	1934
Virginia State University*** Petersburg, VA	1882	1872	August 30, 1890	1923	1937	1933
West Virginis State College**** Institute, WV	1892		March 17, 1891	1919		1927

*Georgia State Industrial College (now Savannah State College) assumed land-grant function from 1890–1947.

**Claflin University was the land-grant institution from 1872–1896

***Hampton University was the land-grant institution from 1872–1920

****Lost land-grant status in 1957.

#The Southern Association of Colleges and Schools maintained dual standards for white and black until 1957, when SACS approved the admission of black colleges as full accredited members. Previously, black colleges could not join the Association as full members but were rated in three classes: "A" (standard), "B" (standard with deficiencies), or "C" (substabdard). Since 1957, all black land-grant institutions have been fully accredited bye SACS or other regional accrediting agencies.

the Morrill Act of 1862. Plagued with insurmountable financial difficulties during the first decade, the school trustees, in accordance with public feeling, transferred the property of Lincoln to the state as a normal school in 1879. Lincoln's primary purpose was training teachers; therefore, the state of Missouri recognized its normal school graduates as teachers for life in Missouri without requiring them to sit for an examination.

Under the leadership of President Inman E. Page, former president of Langston University, Lincoln University made considerable progress and definitive steps toward becoming a land-grant institution. College level work was initiated during the latter portion of the 1880s, and land for the training of students was purchased from lots adjoining the school in 1887. Anticipating the receipt of funds under the Second Morrill Act, and in response to petitions by black citizens, the legislature in 1889 appropriated $10,000 for a suitable building, $9,000 for tools, machinery, and apparatus, $3,000 for additional land, and $3,000 for maintenance. With unusual generosity on the part of the state, the school was able to open its new building to coincide with Missouri's acceptance of the provisions of Morrill Act funds of 1890 on March 13, 1891. The state divided the funds as follows: "one sixteenth (1/16) thereof for the benefit of Lincoln Institute [now Lincoln University], and one fourth of the remainder to the treasurer of the School of Mines at Rolla, Missouri, and the remainder shall be paid to the treasurer of the State University for the benefit of the agricultural college."[23] So beginning in 1891, the state allocated funds to the institution under the Second Morrill Act; however, in 1898, Lincoln received only $1,280.10 of the $24,000 received by the state.

Agricultural education did not become a part of the academic program until 1898, during the tenure of President John H. Jackson.

According to Professor Salvage, the university historian, Jackson wanted the school farm turned into an education project; he wanted every student, regardless of sex, to know something about the subject. His thrust into agricultural and industrial education was not supported by the legislature even though it was supported by the governor. Because of the resistance by the legislature, the agricultural and mechanical arts departments were neglected over the years, preventing willing administrators from making an impact on agricultural education. In fact, when Reverend Edward E. Clarke, the fourth president, recommended that the University establish an academic chair with its professor in charge of farms and that an experiment sub-station be requested of the United States Department of Agriculture, in 1902, the Board of Regents met and dismissed him primarily for his overemphasis on agriculture. While several states dismissed land-grant presidents for overemphasis on the liberal arts, Missouri reversed the trend and dismissed President Clarke for his interest in agriculture.[24]

Under the presidency of Benjamin F. Allen, agricultural education made substantial progress. The original farm was removed from the control of whites, and a new sixty-acre farm near the school was acquired and placed under the school's department of agriculture. In 1913–14 Bureau of Education investigators found that the 264 students enrolled in Lincoln were evenly divided between the elementary and secondary schools. A diploma was given to any student who completed a full four-year course in any of the industrial departments. All male students were required to do one year of work in agriculture, at least one half of which had to be practiced on the Institute farm or its equivalent.

By 1915, Lincoln had two teachers and one laborer reported in agriculture, but an alarmingly low number of students with agriculture as their "trade." In fact, it was during this year that the Board of Regents gave its first real support to the institution for agriculture, raising the annual appropriation from $2,000 to $10,000. Despite the increase in appropriations agriculture at Lincoln was poorly supported and merely an appendage to teacher training programs.

In 1921, the legislature voted to change the name to Lincoln University, changed the controlling body from Regents to a Board of Curators, and appropriated $500,000 to carry out the reorganization and expansion. The funds were never appropriated to meet the lofty goals, and this prompted Professor W. Sherman to write: "It probably was never the intention of the State to give that much to Negro education, but the question had been tied up with partisan politics because both parties had promised to appropriate money for the development of Negro schools."[25] Without funding, the goals of a "university" with its land-grant objectives could not be realized.

President Nathan B. Young, who was fired as president of Florida A&M University, took over the reins at Lincoln University on August 10, 1923. Immediately, he called upon the Board of Curators for a dairy, a dairy barn, and additional farm land. Although Young thought that agricultural education should be available, he did not stress it at the expense of liberal education. In January 1926, Young wrote his colleague at Florida A&M, J.R.E. Lee, that "he did not believe in Negro education, but in education without limits and bounds for the Negro as well as for all American citizens."[26] Any examination of the support for land-grant colleges will show that the state of Missouri, unlike most southern and border states, gave only meager support to agriculture. However, Lincoln University did develop its teacher training in 1926 and a four-year college of arts and sciences in 1934. Five years later, in response to *Lloyd Gaines v. University of Missouri*, in which the "out-of-state" solution to graduate/professional training for blacks was challenged, the court said that "the state was bound to furnish him within its borders facilities for legal education substantially equal to those which the state afforded to persons of the White race, whether or not other Negroes sought the same privileges."[27] Thus, the state established under Lincoln a law school in St. Louis in 1939.

It seems fair to say that Lincoln University was extremely slow in its agricultural development. In his study of Lincoln, Joel Schor found that in 1927 the U. S. Bureau of Education's investigators "praised the school for rendering superior service as a liberal arts and teacher college; however, they found the school wholly lacking in essential equipment, facilities, and teaching staff to provide education of collegiate grade in agriculture and mechanical arts."[28] School officials felt that the institution never received its fair share of federal funds for land-grant emphasis, and Professor Savage found that as late as 1939, the demonstration farm and agricultural program were woefully underfunded.[29]

South Carolina State College evolved from political developments which took place in the constitutional convention of 1895. Blacks, who controlled the constitutional convention of 1868, had seen their numbers dwindle from seventy-six delegates in 1868 to six in 1895. According to Potts: "The major objective of the Convention of 1895 was the disfranchisement of the Negro, and the dominant figure was Pitchfork

Ben Tillman."[30] With the enactment of legal restrictions making the Democratic primary a white primary, blacks were effectively eliminated from all elections that had any significant influence on equitable social and educational developments in the state.

Since blacks were disfranchised and destined to live in a segregated society, black representatives began to call for a state-supported institution of learning free from the domination of the Methodist Episcopal Church and from any other sectarian control. Thomas E. Miller, a black delegate who fought courageously against the disfranchisement of blacks in the Convention, was also a strong supporter of a separate state-supported school for blacks. He proposed that a school be established for blacks by the state entirely separate from the church-sponsored Claflin University, and maintained that only "Southern men and women of the Negro race be on the faculty."[31] With this provision, he pushed through the Convention a bill for a separate institution to be established in Orangeburg.

The state legislature had accepted the provisions of the Second Morrill Act on December 24, 1890 and provided that all funds received under the Act "shall be equally divided between the Colored Normal, Industrial, Agricultural, and Mechanical College and the Clemson Agricultural College, to be applied to the purpose specified in said acts."[32] Five years later, the land-grant functions were totally separated from Claflin University and placed at the State College. In arranging the separation, 186 acres of land were also transferred to the new college. Orangeburg was selected as the ideal location for four reasons:

> (1) The state owned a tract of land unsurpassed in strength of productiveness and fertility especially adapted to mixed husbandry and rotation of crops. (2) There was already here an industrial plant which could not be duplicated elsewhere at the same cost, well established and equipped for instruction in all the Mechanical and Industrial Arts. (3) There were also a herd of registered dairy cattle the equal of any in the State. (4) Orangeburg is a healthy locality, situated in the geographical center of the Black Belt of South Carolina, and being a railroad center, easily accessible to all portions of the State.[33]

So on June 10, 1896, South Carolina State College (SCSC) began operation under the leadership of President Thomas E. Miller, a graduate of Lincoln University in Pennsylvania. The Orangeburg site had the basic ingredients to permit it to carry out the land-grant functions in accordance with the law. As early as November 27, 1896, South Carolina State's "purpose and scope" stipulated that it was "committed to normal, industrial, agricultural, and mechanical training and in addition, there was a strong emphasis on military training."[34]

In response to federal law, an agricultural department was established in 1896 to provide "a knowledge of the application of the natural sciences to the complex operations of agriculture."[35] The course of study included geology, horticulture, dairy work, stock feeding, animal husbandry, agricultural engineering, entomology, and butter-making. In home economics, girls were instructed in sewing, dressmaking, millinery, cooking, and domestic economy. These courses merely supplemented the teacher training program; however, in 1917, the Department of Home Economics was definitely established. During that year, the Smith-Hughes Vocational Act was passed, and it made provisions for regular and special instruction in Home Economics.

Like most other black colleges, SCSC was primarily an all-purpose training school running from kindergarten through high school, with a smattering of normal school training. Teacher training was the primary focus, beginning at the preparatory training level. Although the new college inherited the farm, dairy, barn and stables in the transfer of land-grant functions from Claflin University, funding for the college from the very beginning was poor, with only $5,000 annually from the federal government for the first five years. When federal appropriations were increased in 1913 to $30,754, state appropriations were only $12,614. Farm equipment and livestock were valued as $3,000.

The state of South Carolina contained an enormous black population, some 1,229,500 in 1927. Black public schools were few in number so that only 80 students per 10,000 were attending preparatory school. Their enrollment in secondary school for the same period was 440 blacks for every 10,000 whites. The Department of Education in response to the General Assembly had established the degree of "Licentiate of Instruction" for teachers who finished the Normal Department of SCSC. The Normal Department was phased out in 1928 and concern for four-year institutional services intensified.

South Carolina State College began its four-year collegiate program in 1924. The number of bachelor's degrees in agriculture granted during the following years was: one in 1923–24, one in 1924–25 and four in 1925–26. The faculty in agriculture consisted of three professors, one associate, and one instructor. Bureau investigators had little to criticize in agriculture beyond low enrollment. They also recommended that the college library and laboratory facilities be strengthened.[36] The first three presidents, Thomas E. Miller 1896–1911; Robert Shaw Wilkerson, 1911–1932; and Miller F. Whittaker, 1932–1949, were outstanding supporters of agriculture, home economics, and mechanical arts. Under Whittaker, the high school was phased out of the instructional program in 1933. Like so many colleges in other states, it was in the early thirties that black land-grant institutions became colleges in fact as well as in name. SCSC was approved by the Southern Association of Colleges and Secondary Schools (SACS) in 1932. By 1940, the institution had five divisions: Agriculture, Arts and Sciences, Home Economics, Mechanic Arts, and the Summer School. In 1941, SACS approved the College as a class "A" institution, using the dual standards for black and white institutions.

Agitation for a school for training black teachers started shortly after the University of Arkansas was opened at Fayetteville in 1872 to train the state's white citizens. When J. C. Corbin, a black man, was elected to the position of State Superintendent for Public Instruction in January, 1873, he also became President of the Board of Trustees of the University of Arkansas and for a short time served as President. It was at Corbin's urging that on April 25, 1873, the General Assembly authorized the Board of Trustees to "select a suitable site and locate thereon a Branch Normal College"[37] (now University of Arkansas at Pine Bluff—UAPB). Although no mention was made of race or color in the establishing of the Branch Normal College, it was understood that its mission was the training of black teachers.

So as a branch of the University of Arkansas at Fayetteville, UAPB opened its doors on September 27, 1875 to seven students, with J. C. Corbin as its president and with a state appropriation of $25,000. Beginning in a rented frame building on the corners of Sevier and Lindsey Streets in Pine Bluff, in 1882 it was moved to a new location on a fifty-acre plot on the outskirts of the city. Initially, the school served to train teachers for service in black public schools of the state. UAPB was primarily an elementary and secondary school during the early years, but from 1894 to 1929 the school operated as a junior college.

On April 9, 1891, the legislature accepted the provisions of the Morrill Act of 1890. In compliance with the provision that a state must make equitable division of funds for both blacks and whites, the State of Arkansas divided the funds as follows: eight elevenths for the University of Arkansas at Fayetteville, and three elevenths for the University of Arkansas at Pine Bluff.[38] According to the UAPB Catalog of 1893–1894, the Mechanical Arts Department came into existence in 1892, at which time the two areas of study were the Normal Department and Mechanical Arts Department.[39] President Corbin stated that the Mechanical Arts Department gave "the colored boys of our state a chance to make themselves useful by learning to be carpenters, pattern makers, moulders, blacksmiths, mechanics, and engineers or firemen."[40] Even though land-grant funds were allocated to the college in 1891, there was no effort to develop an agricultural department during the early 1890's.

The earliest efforts to bring agriculture to UAPB came during the administration of President Isaac Fisher (1902–1911), a graduate of Tuskegee Institute and a disciple of Booker T. Washington. He wanted to "give the state of Arkansas another Tuskegee," with emphasis on agriculture, mechanical arts, and teacher training education. However, Fisher later had to admit that "The mass of the Negroes in Pine Bluff were opposed to the Tuskegee system of education; they thought it would only enable their children to be farmers, 'hewers of wood and drawers of water', which smacked of slavery . . . , to them the classical type of education that Corbin, a highly educated man, was trying to build up was the real education."[41] It was not until President Jefferson G. Ash, Jr. (1915–1921) took the reins of the institution that UAPB was able to introduce an agricultural department at the high school level in 1915, thus expanding the land-grant idea.

It was in the 1925–26 school year that a two-year junior college course was introduced. The junior college curriculum had six departments: Normal Training; Scientific Course/Pre-Medicine which was approved by Howard University; Teacher Training in Smith-Hughes

Agriculture; Teacher Training in Household Economics; Teacher Training in Trade and Industries; and Summer School. The Agriculture Department offered three courses: vocational, teacher training, and public school agriculture. Model farm buildings were erected, a new farm was acquired, and the teacher training course prepared teachers of agriculture for the grammar and high schools of the state.

In 1927, the name of the institution was changed from Branch Normal College to Arkansas Agricultural, Mechanical, and Normal School, and during the same year, it severed its connections with the University of Arkansas. In 1929 the school evolved into a standard four-year degree-granting institution and in 1933 was certified as a standard four-year college. During the tenure of President J. B. Watson (1929–1942) the Agriculture Department became a thriving unit. The objectives were: to train farmers; to train teachers; and to train vocational teachers, farm agents, and other rural leaders. The Department included Agronomy, Animal Husbandry, Teacher Training, and the college farm. Work on the farm was done by students taking agricultural courses. The farm provided meat, vegetables, milk, butter, etc. for the student body in the college dining room. The farm had an orchard; it produced grapes, potatoes, cabbages, tomatoes, and eggplants. They also raised chickens, turkeys, cows, hogs, and horses. They had a modern brooder, a $20,000 dairy barn, and a good supply of farm equipment.[42]

In 1940–41, Agriculture and Mechanical Arts were united into a division, and Home Economics continued as a separate division. President Watson believed that it was unwise to invest too much money in the Mechanical Arts Department because of the small demand for black mechanics. However, he strongly advocated farming as the best occupation for blacks because "For his own good and the health of the South, the Negro must be taught farming."[43] Watson's untimely death in 1942 led to the appointment of Lawrence A. Davis, Sr. (1943–1972) as president/chancellor. Davis was instrumental in leading UAPB during its greatest period of overall growth, including agriculture, mechanical arts, and home economics.

Six years before the founding of Tuskegee Institute, Alabama A&M University (AAMU) began on the outskirts of Huntsville, Alabama.

Under the leadership of an ex-slave, William Hooper Councill, it began as the Huntsville Normal and Industrial School on May 1, 1875, with two teachers, sixty-one students and a meager state appropriation of $1,000. From the very beginning, Councill, a self-made man, was determined that industrial education must be a part of the education for blacks. There is evidence that industrial education was introduced at Alabama A&M University as early as 1878 and was later a factor in attracting financial assistance from the Slater and Peabody Funds. Due to inadequate state appropriations and Councill's difficulties in raising money for facilities and teachers' salaries, all educational programs developed very slowly.

By the fall of 1883, the new school had begun a definitive program in industrial education which included sewing, printing, carpentry, mattress making, and gardening. Since the school did not have facilities to teach mattress making, students were sent to nearby factories for their training.[44] Councill wrote to General Joe Wheeler, then Congressman from his district, "We are adding an industrial department to our school, and our chances of getting aid from the Slater and Peabody Funds are in proportion to the success attained by this new addition." The work in industrial education was so successful that in 1885 the state legislature authorized the appropriation of $4,000 annually for the support of the school and authorized it to change its name to the State Normal and Industrial School at Huntsville. The amount of this appropriation, which was administered by President Councill, remained the same until 1891.

Alabama was blessed with two great educational leaders in the persons of Councill at AAMU and Booker T. Washington at Tuskegee Institute. Both were gifted orators, aggressive and inspiring educators who were deeply committed to the art of politics and desirous of receiving 1890 Morrill Act funds for their schools. When it appeared that Tuskegee would get the funds due to Washington's influence, Councill wrote letters to state legislators pointing out that "not one foot of the soil of Tuskegee was owned by the state but that the trustees of Huntsville State Normal and Industrial School had deeded the land and buildings to the State of Alabama."[45] A special committee was appointed to study the schools and make a determination. The Huntsville school was chosen and the committee reported that the selection was made because it was doing the best work in education.[46]

In 1891 the legislature accepted the terms of the Morrill Act of 1890 and provided that "the division of funds . . . between one college for white students and one for black students shall be based from year to year upon the ratio of the number of each race of legal school age to the population of school in the State of Alabama . . . "[47] The first division of funds allocated to whites was fifty-six and six tenths (56.6) percent, and for blacks forty-three and four tenths (43.4) percent.[48] Once assured of federal funds, the commissioners of the school sold the Huntsville site and invested the proceeds in 182 acres located on high ground at Normal, Alabama, a few miles from Huntsville.

In pursuit of the new land-grant mission, a new barn and a dairy building were subsequently constructed to encourage agricultural instruction at the institution. Although there were scattered references to agricultural training in the school's Catalog for the early 1890's, a designated program did not appear until after the turn of the century.

Land-grant functions started in 1891 with $6,000 in federal appropriations and increased to $22,000 in 1913. In 1896, the name of the institution was changed by the Alabama legislature to the Agricultural and Mechanical College of Alabama for Negroes. From 1901 to 1909, the institution was listed as a four-year college with a well-defined agricultural course beginning in 1896. For example, in the 1907–1908 Annual Catalog, an extensive four-year college department agricultural course was shown which included such courses as agricultural chemistry, soil science, history of agriculture, dairying, drainage and irrigation, stock breeding, veterinary hygiene, fertilizers, horticulture, animal and vegetable pathology, truck farming, forage plants, animal judging, agricultural engineering, experimental work at each level, and cognate courses in the sciences. When one analyzes the human and fiscal resources available to the institution, it appears doubtful that a four-year agricultural course could have been offered by one or two teachers who composed the total agricultural faculty. Nevertheless, AAMU's records show that it offered bachelor's degrees between 1896 and 1909; however, the Catalog program descriptions do not indicate that they were standard four-year college degrees. Joel Schor's study of Alabama A&M College noted that old photographs show only "a small dairy herd, swine, fields, and orchards supervised by students."[49]

After President Councill's departure, his role was taken by President Walter S. Buchanan, a graduate of Tuskegee Institute and Harvard University. Because of inadequate state support, Alabama A&M lost its four-year status and operated as a junior college until 1939. It became accredited as a junior college in 1932 and in 1939 was made a senior college again. The 1915–1916 Catalog described the chief aims of the school: 1) to train industrial workers and (2) to prepare teachers who are qualified to give practical instruction in some form of hand work. Although a large number of students were listed as pursuing agriculture and mechanical arts in 1913–1920, of the more than 2,300 graduates between 1875–1920, practically all were in teacher education with scatterings of subject matter in agricultural and mechanical arts courses. Also, since a majority of the students studied at the elementary and secondary levels, it seems that most would have been elementary and secondary school graduates.

Under President Buchanan, the institution became one of the few black colleges to participate in the Smith-Lever Act in cooperation with Alabama Polytechnic Institute, and was able to conduct a department in agriculture and home economics in several nearby counties. The Annual Farmers Conference was begun at Alabama A&M in 1909, and the extension and farm demonstration activities were built on this foundation. Of the extension and farm demonstration programs Schor states: "This was an effort to reach all of the county farmers, regardless of color. White farmers not only urged their tenants to attend, but they attended themselves and offered their land, stock, and implements for purposes of demonstration."[50]

During the administration of President Theophilus R. Parker (1920–1927), the institution was in heavy debt and its enrollment decreased so much that most people thought the school would be closed. In fact, Parker was criticized for extravagance when he purchased the first pair of mules for the farm. However, under the leadership of Dr. James Fanning Drake (1927–1962), the institution made many significant gains. His long tenure witnessed many changes in agriculture, which included the addition of four trades buildings, twenty farm buildings, and 611.13 acres of land. The most significant achievement under Drake for the future development of agriculture was the elevation of the institution from a junior college to a senior college level in 1939. Its first four-year class graduated in 1941. It was in 1939 that true collegiate training in agriculture began at the institution. It was not until 1948 that the name was officially changed to Alabama A&M College for Negroes.

Prairie View Agricultural and Mechanical University (PVAMU) had its beginning on March 11, 1878, on the Alta Vista Plantation located in Waller County near the village of Hempstead, Texas. It was authorized by the Texas Constitution of 1876, which pledged that "separate schools shall be provided for the white and colored children, and impartial provisions shall be established for both." Subsequently, $20,000 was appropriated to purchase a site and make provisions for the black youths of the state. Under the direction of a three-man commission, the new school opened. Professor L. W. Minor was the principal teacher and eight young black men, who became the first of their race to enroll in a state-supported college in Texas, were the only students. Professor Minor was joined on the teaching force by two brothers, E. H. and L. C. Anderson, who became the second and third principals, respectively, of the struggling college.[51]

Although Prairie View began as a separate Agricultural and Mechanical College of Texas for Colored Youth, it was placed under the management of the Board of Directors of the Agricultural and Mechanical College at Bryan, Texas. Chief administrators at PVAMU were referred to as "principals" who generally served under the direction of the president of Texas A&M College. During the leadership of Principal E. H. Anderson, in 1879 the institution changed its role as an agricultural and mechanical college to that of a normal school. The change was motivated by an annual grant of $6,000 from the Peabody Fund for the support of a normal school for blacks patterned after Hampton Institute.[52] Since practically all courses were at the elementary and secondary levels, the promoters of the normal school idea wanted a place to train teachers for the masses. That is, they favored a practical education as opposed to one with emphasis on the liberal arts; in essence they promoted an education that taught respect for labor and for the cultivation of the land—a program which would be accepted and supported by white Southern leaders. A. J. Peters, who was secretary of the Board of A&M, said:

> I assume and sincerely trust that this institute will receive a generous support from the State, having always felt that it was our duty, claiming to be a superior race, and having control of the government, to do all in our power that promised beneficial and practical results, to educate and elevate our colored citizens.[53]

In 1985, L. C. Anderson became the principal and served for 12 years. He made every effort to offer teacher education that brought beneficial and practical results in the Armstrong and Hampton mode. He asked the Board to lengthen the period of training beyond a year to enable him to prepare the teachers better. Acting alone, he supervised the entire educational facility, which included the farm, its implements, and its livestock, consisting of two horses, four mules, thirty head of cattle, and forty head of hogs.[54]

When Prairie View became a normal school, the constitutional questions were asked: Should such a school be permitted to share federal funds? Should it be a part of the University pattern? However, with the passage of the Hatch Act of 1887, and the action of the state legislature, the small school became the recipient of $5,000 over a two-year period. With the Hatch Act funds, Prairie View elected to prepare grounds for a variety of fruit trees, vines, and grains and grasses, which would be used in the conducting of experiments. The elevation to full land-grant status came on March 14, 1891, when the provisions of the Morrill Act were accepted by the state. It was agreed that "(A) moneys apportioned to the state of Texas under the Act of August 30, 1890 . . . shall be apportioned between the agricultural and mechanical college and the Prairie View State Normal School on the following basis . . . three-fourths to the Agricultural College, and one-fourth to the Prairie View State Normal School."[55] As one of the few black colleges to receive Hatch Act funds, and with an orientation toward practical education based on the Hampton and Tuskegee patterns, PVAMU was ready to begin its venture as a black land-grant institution.

Prairie View became a four-year college in 1919, the first class of five graduated in 1921, and a division of graduate studies began in 1937.

In 1927, Arthur J. Klein's study of black schools under the sponsorship of the Bureau of Education gave Prairie View a favorable report. The institution was offering a standard bachelor degree and was on its way toward permanent accreditation. The study mentioned a four-year course (180 quarter hours) in agriculture which included 50 credits in agriculture, 18 in English, 58 in science, 17 in social science, 38 in education, nine in veterinary science, one in physical education, one in military training, and six in electives. Additionally, the school offered a two-year curriculum in vocational agriculture. The old normal course came to an end in 1921.

Under President Osborne's direction, Prairie View became the official training center for teachers of vocational agriculture in 1920. The school worked closely with J. B. Ruthland, the state director of Negro vocational agricultural programs. The school's president wanted Prairie View's experience to be felt statewide, therefore efforts were made to extend the work of teachers of home economics and mechanical arts as well as agriculture. As President Osborne put it, the role of Prairie View was "to prepare not only teachers, but farmers, managers, superintendents, and extension workers."[56] Thus, he wanted a second four-year college course built on a firm literary/scientific base leading to the Bachelor of Science degree. Despite Osborne's effort, when he was forced to step down in 1923, there were a total of 45 students enrolled in agriculture, 47 in home economics, and only 10 in mechanical arts.[57]

The Cooperative Extension Service, perhaps the only one headquartered at an 1890 institution, was used creatively to reach the black citizens of Texas. Using the cooperative efforts of C. H. Waller, former professor of agriculture and head of the Agricultural Division at Prairie View, his policy of adding one or two men annually, even during the depression years, enabled new graduates of Prairie View to find an outlet for their service.

Although President W. R. Banks, who served as president from 1926–1947, showed great concern for raising the institution to the level of other land-grant colleges in the South, the depression years virtually turned his dreams into ashes. Nevertheless, during his tenure, the physical plant doubled in size with the addition of three apartment buildings for male teachers, three dormitories for women, a dining hall, a greenhouse, an incubator house, a classroom building, an NYA resident center, a library, and more than 50 cottages for faculty members.[58] The Senior Academy was discontinued in 1930 and the Division of Education was renamed the College of Arts and Sciences with a major department in teacher training. The Division of Graduate Study, which was organized in 1937, offered the Master of Science degree in agricultural economics, rural education, agricultural education, administration and supervision and rural sociology. In 1945, the legislature changed the name from Prairie View Normal and Industrial College to Prairie View University.[59]

Southern University was initiated in the State Constitutional convention of 1879 by black delegates P.B.S. Pinchback, T. T. Allain, T. B. Stamps, and Henry Demas. This gesture culminated in Article 231 which provided that "The General Assembly shall establish in the city of New Orleans a University for the education of persons of color; provide for its proper government, and shall make appropriation of not less than five thousand dollars nor more than ten thousand dollars for maintenance and support."[60] Pursuant to an act of the General Assembly of the State of Louisiana, the new institution was chartered as Southern University in April 1880 and a Board of Trustees was empowered to "establish a faculty of arts and letters, which shall be competent to instruct in every branch of liberal education, and . . . to graduate students and grant degrees pertaining to arts and letters . . . ."[61] So with this authority, Southern University was opened on March 7, 1881 on Calliope Street, between St. Charles and Camp Streets, with twelve students in attendance, and with George Fayerweather as president. The University remained on Calliope Street until 1883, when it moved to Magazine and Sonial Street Square where a suitable brick building was erected by March 1887.

During its first six years the University had five presidents and considerable growth and progress occurred under each. Each president received a regular appropriation of $10,000 annually from the State for the operation of the school. Because of the inadequacy of these funds, "in some cases, Board of Trustee members utilized personal funds to get the school underway and to assist in its survival."[62] The initial aim of Southern University was "to supplement the public school by offering college instruction and industrial and normal training under conditions calculated to stimulate the desire for thorough classical and practical education among the colored people of the State."[63] Even though Vincent found evidence that the University had a strong industrial thrust from its initial year, the fact that the institution was founded for the purpose of instructing black people "in every branch of liberal education" indicated that its founders had no concern for agriculture as a course of study. Thus, the nine years of operation by Southern University prior to 1890 gave no advantage whatsoever to agriculture.

The University's agricultural and mechanical offerings were greatly enhanced by the passage of the Second Morrill Act of 1890. The state legislature accepted the provisions of the Act on January 23, 1893, but no division of funds was mentioned.

A heated controversy emerged over the proposed division of the funds which involved the president of Louisiana State University, J. W. Nicholson, the State Board of Supervisors, and Governor Francis T. Nichols on the state level and reached as high as Secretary of the Interior, John J. Noble, on the national level. After a discussion involving a two-thirds to one-third division in favor of LSU and a 60/40 division as an alternative, Secretary Noble did not accept these local arrangements and divided the money equally between the universities in the first two installments, but the population arrangement was used.[64] With the acceptance of 1890 funds and with an agreement on the use of these funds, more stable financing was assured for Southern. The institution was then able to move more aggressively toward the establishment of a land-grant mission with well-delineated agricultural and mechanical departments.

With more stable financing assured under the Second Morrill Act, the University moved aggressively to establish its agricultural and mechanical departments. The curriculum requirements and practices of students were similar to the experiences and struggles of other black land-grant colleges. The major requirements for admission to the Agricultural Department were: "Evidence of good moral character and having passed the studies of the present seventh grade or the equivalent," and four years was the normal time to complete the course of study. Under a new professor of agriculture, Hugh Jamison, Jr., the institution began searching for a suitable farm to rent or purchase. A hundred-acre site was finally obtained for lease at a cost of $800 per year near Harahan, Louisiana, and appropriate equipment and supplies were purchased. On the hundred-acre farm the grounds and buildings were subdivided by white fences into fields, pastures, woodlands, orchards, and barnyards. Field crops, including corn, sugar cane, cotton, tobacco, oats, potatoes (Irish and sweet), cabbage, onions, and melons, were grown. Although progress was made in improving facilities for the farm and mechanical arts department, the annual report for 1901–1902 shows that these were small operations. It observed:

> Vast improvements were made at the Southern University farm. The old crippled and disabled stock on the place were sold; new mules and horses purchased; cows were purchased for the dairy department; the building repaired, renovated, and painted outside and in; the entire place ditched and drained and entirely renovated; new page wire fences erected and the place put in a fairly first class order.[65]

In comments made about the Dairy Department, it was pointed out that "The livestock consisted of one Jersey bull, six cows, two heifers, and one calf."

Pursuant to a legislative act of 1912. Southern University in New Orleans was closed after the term ended and was reopened on March 9, 1914, near the capital city of Baton Rouge at a new site called Scott's Bluff. *The Baton Rouge State Times Advocate* on March 10, 1914, gave this account of the new beginning under the leadership of President J. S. Clark:

> With eight plows, manned by students and instructors, preparing ground for planting and a number of students acting as workmen in the construction of the remaining temporary buildings, Southern University, the Negro industrial school, opened at the new site on Scott's Bluff, north of Baton Rouge, presented a scene of activity this morning.
>
> The work of planting between 100 and 200 acres of land in corn was begun today. The corn will be used to feed the hogs, mules, and cows to be secured for the agricultural department. The construction of a model dairy to provide milk for the school will be started immediately. A silo is planned for construction next fall. A truck farm will be laid out and the students will raise truck (sic) for their own consumption and for the market.

> Work in the blacksmith and wood shops will be started at once, and the students will employ their time in working both for the school and for the surrounding country. The shop will be advertised, and farmers can bring their horses to be shod, plows to be sharpened, wagons to be repaired, etc., all at a reasonable cost.
>
> The several women instructors were on hand to begin work of the domestic science department. In this department practical instruction in cooking, sewing, sanitation and home economics will be given.[66]

The agricultural program at the new university was given full support by President Clark. During his first months in office, Clark visited twelve land-grant colleges to get a close look at their agricultural programs. In addition to establishing sound curricula in agriculture, mechanical arts and home economics, which was relatively traditional, he led his faculty toward greater emphasis on community relationships and service. Among his innovations were the short courses and annual conferences for farmers. As Clark pointed out in 1916 at the opening of one of those conferences, "Southern University's mission is to help the Negro farmer and the Negro teacher in the full preparation of their life's work to do whatever their hearts, heads, and hands may be trained to do, but I want to help the farmers themselves and I feel that this can be done through farmers and demonstration agents . . . ."[67]

Although Southern carried the name "university," there were few courses at the college level until 1920. During that year, the Teacher Training Department had three divisions: the Normal Department, Home Economics, and Vocational Agriculture. The agricultural and industrial departments were the main thrust of the curriculum. In response to an Examining Committee, in 1917, Southern had been reorganized to emphasize preparation for rural life, teacher training and expert advice in farm operation. Acting on the suggestion that a true normal college curriculum should be added, Southern added enough courses to have a standard junior college curriculum in 1920. By the 1925–26 session, the College Department added the four-year course of study leading to the B.S. degree in Vocational Education in Agriculture. The College Department in 1924 had established two courses of study in Liberal Arts and Sciences and the College of Education, both leading to the A.B. and B.S. degrees. Students were required to complete no less than 180 quarter-hours of credits with no grade lower than "C."[68]

Under the leadership of President J. S. Clark, Southern added in 1927–28 and in 1929 a degree-granting teacher training curriculum in agriculture and home economics. The first graduate from the home economics department with a bachelor degree was in 1931. Under the presidency of Felton G. Clark, who succeeded his father in office, Southern obtained in 1937 an "A" rating from the Southern Association of Colleges and Secondary Schools and kept that rating during Clark's tenure as president.[69]

CHAPTER THREE

From Exclusion to Inclusion: The Impact of the Morrill Act of 1890

(Continued)

TUSKEGEE University was established as the Normal School for Colored Teachers at Tuskegee in 1881 with an annual appropriation of $2,000 from the legislature of Alabama. Upon the recommendation of General Samuel C. Armstrong of Hampton Institute, Young Booker T. Washington was selected to head this "landless, buildingless, teacherless, and studentless institution."[1] Accepting the challenge, he found a building, made arrangements to purchase a farm, and opened the school on July 4, 1881 with 36 students and no teacher other than himself. Later in the fall of the year, he was joined by three other faculty members from Hampton Institute, and the "Tuskegee idea" of educating students was firmly under way.

Although Tuskegee began with financial support from the legislature, in 1883 it became a private school and its first Board of Trustees became independent. This change allowed Washington the latitude to broaden the external social base of the institution without the direct control of the state of Alabama. The purpose of the newly incorporated Tuskegee Normal and Industrial Institute was "the instruction of colored teachers and youths in the various common academic and collegiate branches, the best methods of teaching the same and the best methods of theoretical and mechanical arts."[2] thus, the aim of training at Tuskegee was threefold: to furnish the students with paying labor to help them work their way through school; to teach the dignity of labor and self-help; and to teach trades and furnish the students with a practicable business-like idea of how to make a living.[3] Labor was not an option or an elective at Tuskegee, it was required.

Washington tried to have Tuskegee designated a land-grant college but because Tuskegee was private, he lost out to Alabama State University, a public institution. Even though it never achieved land-grant status, it received a substantial land grant when a special act of the 55th Congress in 1899 authorized the governor of Alabama to select from the public domain 25,000 acres to be used to endow Tuskegee Institute. Washington firmly developed and molded his institution around the land-grant idea, with agriculture and mechanical arts (industries) being the heart of the curriculum. Having clearly enunciated his educational philosophy, he proceeded to put it into action through the great "experiment" at Tuskegee.

In order to shape the Tuskegee curriculum, he carefully studied the conditions under which black people lived in rural areas. He quickly verified what he already knew, that one problem of the masses of blacks who lived virtually in the shadow of Tuskegee was landlessness, together with the evils of sharecropping that weakened the black family life and rendered it economically insecure. He also observed the aimless mobility of the black population. Washington put it like this: "Something must be done to stem the swelling tide which each year sweeps thousands of black men and women and children from the sunlit monotony of the plantation to the sunless inequity of the slums: from a drudging that is not quite cheerless to competition that is altogether merciless."[4] Thus, agriculture became the major course in the college's curriculum. The expressed mission of the college was that of training teachers for the various schools, under the assumption that these teachers would be able and eager to teach gardening and carpentry as well as grammar and arithmetic.[5] Every teacher was imbued with the idea of integrating theory and practice in the educational processes in keeping with the Washington axiom that "an ounce of appreciation is worth a ton of abstraction."[6]

Booker T. Washington's philosophy of education was soon endorsed widely throughout the South and became the dominant pattern of early education for 1890 land-grant colleges. Bullock maintains that two major impressions which Washington made upon the course of education for blacks in the South stand out above the rest. First, his educational philosophy and practice allayed the fears of southern whites concerning the Negro and won the support of whites of both regions for the public education movement. The second and greatest Washington influence, however, probably rested with the weight he gave to the special education movement.[7] Bullock further states that

> He left little doubt in the minds of a large number of educators and philanthropists that Negroes required a particular kind of education for their particular condition. He seemed to have looked forward to a completely biracial society of benevolent coexistence with whites. He chose to educate Negroes within the framework of a racial division of labor that had always existed in the South. Although he did not advocate industrial education for every Negro to the exclusion of the professional and other branches of learning, he did imply that the sole excuse for these latter branches was in the existence of the segregated communities where Negroes were forced to live.[8]

While there was competition between William H. Councill of Alabama A&M University and Booker T. Washington during the early years of their leadership in Alabama, five years after the Second Morrill Act became law, Washington emerged as the dominant figure in the field of black education in the nation. Speaking before the Atlanta Cotton Exposition in 1895, the same year and city in which William T. Harris, U.S. Commissioner of Education, had so convincingly extolled the virtues of classical education for everyone, Washington outlined the basic ground rules by which blacks and whites could coexist peacefully in the South. The great exponent of the conciliatory school urged black people to abandon their interest in starting at the top and do things which were possible rather than whine over things forbidden. In reference to blacks' immediate past after slavery, he said:

> ignorant and inexperienced, it is not strange that in the first years of our new life, we began at the top instead of at the bottom; that a seat in Congress or the state legislature was more sought than real estate or industrial skills; that the political convention or stump speaking had more attraction than starting a dairy or being a truck driver.[9]

Washington's theory concisely stated was that blacks should first strive for economic independence and should leave the adjustment of social and political relations to the future. His suggestion that each race start where it was reverberated throughout the nation. He forcefully proclaimed: "In all things that are purely social, we can be as separate as the fingers, yet one as the hand in all things essential to mutual progress."[10] He believed instead of clamoring for social recognition, blacks should diligently try to get something worth recognizing. Blacks should first become skilled workers, for the key to achieving full usefulness in the South was through agricultural and industrial education. While Washington did not openly attack classical higher education for blacks, he insisted that in getting an education blacks should get something they could use. There was, after all, very little demand for an ability to translate *Ceasar's Commentaries*. Consequently, he advised:

> Cast down your bucket where you are—cast it down by making friends in every manly way with the people of all races by whom you are surrounded. Cast it down in agriculture, mechanics, in commerce, in domestic science, and in the professions.[11]

He appealed to whites to "cast down upon eight million Negroes" who could, once again, form the basic labor supply for the South. Almost apologetically, he assured whites that the most intelligent of the black race had understood that agitation for social equality was "the extreme folly." Rather, progress, must be made through severe and constant struggle and not by "artificial forcing." He assured blacks that

> no race that has anything to contribute to the markets of the world is long in any degree ostracized. It is important and right that all privileges of the law be ours, but it is vastly more important that we be prepared for the exercise of these privileges. The opportunity to earn a dollar in the factory just now is worth infinitely more than the opportunity to spend a dollar in the opera house.[12]

Washington apparently did not fathom the depth of prejudice and racism that existed in the South, where the color of the skin and not economics or educational achievement determined the place of blacks in society. So with his educational philosophy enunciated and accepted by the majority of the white leaders, he began assembling a cadre of leaders to help him effectuate his programs. Foremost among these was Dr. George Washington Carver, who held the Ph.D. degree from Iowa

State University. Carter joined the institution as the head of the Division of Agriculture in 1886. With such an outstanding young scientist aboard, Washington was able to influence the legislature to place an agricultural experiment station at Tuskegee on February 15, 1887. The state agreed to pay Tuskegee $1,500 a year for operating and maintaining the station, with the institute providing the necessary land and buildings. Dr. Carver was named director of this first experiment station on a black campus and was assigned a staff of six persons to help him carry out the responsibilities of the station.[13]

The early impact of Washington can be partially ascertained through an examination of his annual farmers and workers conference/institutes which were copied throughout the South. On February 23, 1892, farmers were invited by Washington to spend a day on the campus in the hope of arousing interest among them in the practical affairs of life. More than four hundred men and women who attended this First Tuskegee Negro Conference were encouraged to discuss their problems, which included crop-lien burdens, one-room cabins, education of children, and moral and religious needs. He also preached the virtues of self-help and methods by which farmers could improve their overall conditions. The Farmers' Conference, Workers' Conferences and Women's Conferences expanded each year and by 1900 the Farmers' Institute idea had spread to most agricultural colleges and were replicated in states like Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, and practically all other land-grant institutions at a later date. Dr. Carver and other dignitaries were frequently invited to participate.

Two innovations which came out of the Farmers' Institutes and the Negro Farmers' Conference were the community and county fairs which lasted for two or three days and the "Short Course in Agriculture." These short courses featured professors and guest lecturers who presented information on general farming, livestock, dairying, poultry raising, fruit growing, and truck gardening which undoubtedly enhanced the farmers' ability to improve his production.[14]

Washington pushed his "Tuskegee Idea" throughout his administration and "actively resisted every attempt to emphasize the liberal arts or elevate Tuskegee to the college level."[15] Upon Booker T. Washington's death in 1915, the school was still a citadel of industrial training for black people, with training not exceeding the normal school level. The burden was placed upon Major Robert Russa Moton to diversify the institute and lead it toward collegiate status.

When Moton took the leadership in 1916, "no students were studying on the college level and two-thirds of the student body was below the secondary."[16] By 1927, Moton changed some of the distinctiveness of Tuskegee when a college department was organized. In 1932 the first four-year college class graduated and in 1933 the Southern Association of Colleges and Secondary Schools visited Tuskegee Institute and gave it a "B" rating. In 1943, graduate level instruction was initiated at the institution in the fields of rural education, home economics, and agriculture. In 1944, a School of Veterinary Medicine was established, further contributing to the complexity of the University and the decline of industrial distinctiveness upon which the school was founded.

The bill creating the Virginia Normal and Collegiate Institute was pushed through the General Assembly on March 6, 1882 by a black member of the House of Delegates, Alfred W. Harris. The new charter provided that the new college was "to be used exclusively for the education of colored people," that the "professors or teachers in the institute . . . shall be colored," and that the governing board was to be composed of "seven visitors, six of whom shall be well-qualified colored men.[17] The charter further provided that $100,000 be used to buy a suitable site and to construct or remodel buildings on the site for the use of the school and $20,000 annually for the support of its operation. Pursuant to the mandates of the charter, Virginia Normal and Collegiate Institute opened its doors in the village of Ettrick on Monday, October 1, 1883, with 60 students in attendance under the tutelage of six teachers headed by Principal James Storum. That this was purely a venture in black education under black leadership may be seen in the statement by Principal Storum: "No state in this country has taken a position as radical as this, placing state funds and a state institution in the hands of colored men."[18]

The initial curriculum did not make any references to agriculture and mechanical arts. Rather, the school was divided into three departments—academic, normal, and collegiate. During the first six years of the institution under the leadership of classically-trained men like James

Storum, James M. Colson, John Mercer Langston, and James Jugo Johnston, teacher training with a strong liberal arts basis was emphasized. Its first bachelor's degree was awarded in 1886 in a classical curriculum which President Johnston proclaimed "will compare favorably with the best."

During the next fourteen years, the institution conferred forty-nine degrees, but the adverse political climate caused it to revert to lower levels of education. Again, the quality of the degree program when measured against standard degrees was highly questionable.

By 1900, it became apparent that blacks were losing control of their destiny in higher education in Virginia. Although President Johnston gravitated increasingly toward the Tuskegee Plan (carpentry, cooking, sewing, shoemaking, etc.), this did not deter the legislature from making financial and programmatic cutbacks. In 1902, the institution's mission was changed, and the new charter abolished the college program and limited the curriculum to a Normal Department and an Industrial Department. With a change of mission and with uncertain allocations from the state legislature, the school was essentially an elementary and secondary school as late as 1914. As early as 1908, the first agriculture teacher was employed. He managed the farm, and agriculture was taught in the upper grades and in the first year of high school under the rubric of "Art of Agriculture." According to Schor: "That year (1914) the state contributed $22,000 and an additional $2,211 came from the school farm. A two-story building was used for the agricultural department and a frame cottage was used by the agriculture teacher as a home. Bureau investigators, in 1914 and 1915, were anxious for every student to obtain instruction in the theory and practice of gardening."[19]

It was under President John M. Gandy (1914–1942) that Virginia State University (VSU) was gradually elevated to a land-grant, degree-granting institution. As was indicated previously, Hampton Institute shared in the 1862 land-grant funds and had also been the initial recipient of one-third of the 1890 funds. However, in 1920, the state legislature provided that the 1890 funds received by Hampton would be transferred to the then Virginia State College for Negroes at Ettrick. Along with the transfer of authority came an addition of $26,996.02 in land-grant monies under the Morrill-Nelson Fund.

Virginia State University's land-grant functions were enhanced when in 1925 a 189-acre farm was purchased, and Professor Daniel L. Ferguson, the holder of a master's degree in agriculture, was brought in to head the department. In reflecting on his role in agriculture, President Gandy wrote in an article, "The Program of Education at Virginia State College: Vindication," that he viewed his approach to agricultural education as an effort to integrate agricultural economics, agricultural education, animal husbandry, and specialized horticulture.[20] By 1926, the agricultural division combined practical activity with classroom work and offered a total of twenty-five five-hour college-level courses in the areas mentioned above.

Three years prior to the receipt of land-grant status and following the passage of the Smith-Hughes Act of 1917; VSU established in 1917 a department of vocational agriculture, which offered a sequence of agricultural courses equivalent to a major for men enrolled in the Normal School.[21] By 1930, the College had become the headquarters of the Smith-Lever extension work for blacks by legislative enactment. Funds coming from this act were required to be matched by state appropriations, thus increasing appropriations to the institution.

Normal courses in agriculture were continued until 1929. However, to meet the demand for men trained in scientific agriculture, the pursuit of the four-year B.S. degree programs was intensified for the training of agriculture teachers. In 1929 the department of Animal Husbandry was added and in 1932 the department of Home Economics was also added. In the meantime, Professor J. L. Lockett, who subsequently earned a Ph.D. in agriculture from Iowa State University, was chosen to head the division of agriculture. The various agriculture curricula required students to choose a major in agriculture education or animal husbandry at the beginning of the junior year, and to combine classroom theory with laboratory and field training. Upon the completion of 190 quarter hours and six months of practical farm experience, the students were than prepared to work as farmers, farm managers, stock men, poultry producers, as well as agricultural extension workers, vocational agriculture teachers in high school, and workers in industry directly involving agriculture.

By the end of the 1930's, the agricultural division at VSU included a Department of Agriculture, a Department of Animal Husbandry, Department of Home Economics (1932), Department of Agricultural Economics (1933), Department of Specialized Horticulture (1938), Department of Bacteriology (1939), and an experiment sub-station (cooperative project with Virginia Polytechnic Institute) in 1938.[22] Dr. Gandy was able to gain approval by the Southern Association of Colleges and Schools as an "A" rated institution in 1935, becoming one of the first among black institutions to receive this distinction.

The University of Maryland, Eastern Shore, was originally founded as Princess Anne Academy in 1886 by the Delaware Conference of the Methodist Episcopal Church. Initially, it was under the control of the Centenary Bible Institute (now Morgan State University) and its purpose was to provide the requisite instruction to youth "of African descent." Beginning its first classes in September 1886, the academy offered a liberal arts curriculum as well as instruction in shoemaking, carpentry, cooking, tailoring, and blacksmithing.

On March 15, 1892, the Maryland legislature accepted the provisions of the 1890 Morrill Act. After the passage of the Second Morrill Act, the Maryland Agricultural College (now the University of Maryland) drew up plans to "adopt" Princess Anne Academy, even though Morgan State retained control. The action by the University of Maryland was taken to qualify the state of Maryland for receipt of new federal land-grant funds. It was required that no less than one-fifth of the 1890 land-grant funds would be used for the new school. In 1895, instruction in agriculture was performed by a farmer who at stated periods would go into the field, accompanied by a class of young men from agricultural backgrounds. According to the college catalogue in 1900–1901, students could get practical and theoretical training in the nature of soil, seeds, fertilizers, seeding, cultivation, harvesting, and marketing. Also, students were to be exposed to animal breeding, poultry development, and dairying.

Despite the fact that school catalogues indicated four-year agricultural and industrial arts programs, during the period of 1900–1916, Princess Anne Academy was essentially a secondary school. In 1916, the program was described as "a small, well managed school of secondary grade with a few pupils in elementary classes. Effort is made to adapt the work to the minds of rural teachers. Manual trades and agriculture, though well taught, are subordinated to literary studies."[23] Investigators were somewhat disheartened by the fact that only twelve students were concentrating their interest in agriculture. Under the Nelson Amendment to the Morrill Act, the school's share of federal funds reached $10,000 by 1913; however, since the state legislature took scant interest in the school, student fees made up practically all of its additional income.

Under the leadership of the principal, Thomas H. Kiah (1910–1936), the school became Princess Anne College and offered its first college level courses in 1925. The new junior college department included courses in arts and sciences, agriculture, industries, and home economics, with special emphasis on teacher training. In an effort to upgrade the institution, the secondary curriculum was eliminated in 1934. Students who completed the two-year course could enter leading universities at the junior level. The 1932–1933 catalogue noted that "particularly is this true in curricula designed to train teachers of agriculture and home economics under the provisions of the Smith-Hughes Law."[24] The catalogue further stated that "The University of Maryland assists in the development of agricultural, industrial, and home economics education to the end that the productivity of the farms may be increased, and Negro population advanced in general education and intelligence."[25]

Although the University of Maryland had a working relationship with Princess Anne, it effectively excluded the school from Smith-Lever Act Funds of 1914 which provided support for farm and home extension work. The Academy fell under increasing state control in 1926 when the University of Maryland was designated as the administrative agency. In 1935, the University's Board of Regents appropriated $100,000 to purchase the property from Morgan College and renamed the school Princess Anne College. It was not until 1948 that Princess Anne College became a four-year, degree-granting institution and was renamed Maryland State College.

In April 1887, the state legislature of Florida passed a bill which provided for the establishment of two normal schools—one for whites at DeFuniak Springs and one for blacks at Tallahassee. The sum of

$4,000 per year was appropriated to each to meet necessary expenses in 1887 and 1888. Pursuant to that bill, on October 3, 1887, the State Normal College for Colored Students was formally opened in Tallahassee and ultimately grew into Florida Agricultural and Mechanical University (FAMU).

The school began with fifteen students under the leadership of Thomas De Saille Tucker, the holder of an M.A. degree from Oberlin College and noted Pensacola attorney, and Thomas Van Rennssalaer Gibbs, a black state representative from Duval County who was instrumental in pushing the bill through the legislature. The school was initially housed in one cruciform building which was situated on Copeland Street (the present site of Florida State University), but at the request of President Tucker was moved in 1891 to a more spacious rustic site on the highest hill in Tallahassee. The new site, which was called "Highwood," was the former mansion of Florida's first governor, William D. Duval, and was located on 57 acres of land. This move from Copeland Street to Highwood was prompted by Florida's impending acceptance of the provisions of the Second Morrill Act on June 8, 1891. Under the direction of the State Board of Education, the State Normal and Industrial College for Colored Students was to receive half of the 1890 funds. So approximately three months before the Morrill Act funds were formally accepted by the state legislature, the Secretary of the Board of Education informed other members that "seven thousand and five hundred ($7,500) had been appropriated by the fund for the rise of the State Normal and Industrial College for colored Students, and was in the hands of the Treasurer."[26]

By the beginning of the fall following the receipt of 1890 federal funds, the college had three major departments—Mechanical Arts, Agriculture, and Literary. In 1891, Col. W. T. Vason was employed at $1,000 per year to teach agriculture; he was later replaced by Professor W. A. Cuppage, a graduate of Guelph Agricultural College of Toronto, Canada. Also, W. J. Clayton was hired as Superintendent of Farms at $300 per annum. A glowing description of Agriculture is shown below:

> The new Department of Agriculture was comprehensive in its scope, embracing the culture of all semitropical field crops, gardening, fruitgrowing, dairy husbandry, rearing of livestock, poultry, and

drainage. Under the supervision of Professor Vason, agricultural theories were taught in the classrooms, and attempts were made to afford practical training in all major areas. Practical experience was gained on the farm, in the fruit groves, and in the dairy and barns. It was reported by Professor Vason that the farm was supplied with all modern implements and laborsaving machines, and the laboratory was equipped with chemicals and appliances. The department did not suffer from lack of students because all male students in the school were required to take courses in practical and theoretical farming in the field and barn. All females were required to "take the courses in farm housewifery which were included in the agricultural area" as well as in the dairy from the udder to creamery and butter-making. Seeking to satisfy the proponents of agricultural and industrial education, Tucker declared that "the abiding hope of this institution is that Florida will have, in the very near future, teachers to the manor born, of the Negro race, who shall be able to teach the young a practical and thorough training fitting them for the more essential and useful avenues of life." Tucker further emphasized that during the first summer at Highwood, the agricultural department raised an abundance of three varieties of millet, grain and corn fodder, peas, sweet potatoes, and hay. The harvest was far more than was needed for the support of the school. Several acres were also set aside for experimental purposes. The experiments proved successful, with the exception of that on corn, which was affected with a slight disease. The one experiment which appeared most unlikely to produce good results was made with arctic grass which, if grown successfully, could be used to feed stock during the winter. Strange as it may seem, rye was also grown successfully, and, in addition to providing valuable grain, it provided one of the notable social events on the campus. Annually, the boys would engage in a rye-gathering contest, the winner of which would receive a laurel. Undoubtedly, this contest was an import which can be attributed to Professor Cuppage who obtained his agricultural training in a wheat- and rye-growing section.[27]

As Morrill Fund appropriation increased, state appropriations decreased. For example, the combined Morrill Fund and state expenditures for 1895–1896 were $23,281, of which only $3,806.71 came from the state. State funds were applied to the renovation of old buildings or constructing new ones, while Morrill Act funds went primarily toward salaries and teaching aids. The Morrill Fund appropriations were distributed in six categories in 1896: Agriculture, $2,018.77; Mechanic Arts,

$1,790.49; English language, $4,320.10; Mathematics and Natural Science, $1,250; Economics Science, $1,360. Of the $19,474.65 used from Morrill Funds, 34.8 percent went toward teaching equipment and supplies.

After Booker T. Washington's Atlanta Address (1895), the Superintendent of Public Instruction began to demand of President Tucker that greater emphasis be placed on agriculture and mechanical arts. Tucker pointed with pride to a Mechanical Arts Department which included training in carpentry, cabinetmaking, wood turning, pattern making, moulding, casting, forging, brazing, soldering, tempering, chipping, filling, and general machine work. He further boasted that the department was equipped with "one ten-horse power horizontal engine and boiler, one circular saw, one hand saw, one grindstone, one planing machine, one bowing machine, one sharpener, one speed lathe (twelve-foot bed, fourteen inches swing), twenty cabinet makers' benches, benches and training stools for twenty-seven boys."[28] In addition to the agricultural emphasis mentioned previously, President Tucker could point to an Agricultural Department that possessed on its farm Poland China and Berkshire hogs, Plymouth Rocks, George Games and common fowls, a steam engine, ensilage cutter, manure spreader, mower, horse rake, barrows, sulky plow, two-horse plows, and all the one-horse plows and farm tools for practical use. However, of the 178 students enrolled during the period 1896–1897 period, the record showed 29 students in Farming and 57 in Dairying.

Despite the progress in Agriculture and Mechanical Arts, Superintendent Sheats demanded Tucker's resignation because he placed liberal arts education above practical agriculture and industrial training as basic in black education. Sheats convinced the State Board of Education that Tucker had "no influence upon the agricultural and industrial life of the race . . . a contempt for such life has been instilled into his students."[29] With this, Thomas De Saille Tucker was fired and replaced by Nathan B. Young (1901–1922), the second president of FAMU.

President Young, the holder of an M. A. degree in Philosophy and Economics from Oberlin College, pledged to place emphasis upon agriculture and mechanical arts upon his appointment. During his administration's early years, he was able to strengthen agriculture and raise the academic level of the institution in every respect, despite the loss of the Agriculture Building by fire in 1904. In 1905, the institution was placed under the management of the Board of Control, and by 1909, the legislature had changed the name to Florida Agricultural and Mechanical College for Negroes, and recognized it as a four-year college level institution on May 22, 1909. One year later, the first B.S. degree was awarded to Keotus Thompson. Even though the record indicates the awarding of bachelor's degrees by the institution since 1910, it was not until 1920 that the college catalog stipulated that "120 units is the minimum amount of work required for graduation—of which 24 must be major work."[30]

During Young's administration, many innovative changes occurred in the field of agriculture. Training was offered through correspondence courses in 1909; cooperative extension work in agriculture and home economics was begun in 1915 upon the receipt of Smith-Lever Act funds; Mid-Winter Institutes and Year-End Conferences were instituted for farmers in 1914; Farm and Home Makers' Clubs were organized in 1915; and in 1917, William H. A. Howard was named Smith-Hughes Professor of Agriculture, and Robert G. Bruce Smith-Hughes Professor of Mechanical Arts. In June 1920, Professor A. L. Mebane, Dean of the Agricultural Department, lamented the fact that the black students in Florida did not have an opportunity to see and experiment with animals and plants as they should. Therefore, he recommended that an experimental station be set up at the institution. However, inadequate funds and the adverse effect of poor race relations prevented this idea from coming to fruition. Dean Mebane's recommendations for improving the Department in 1920 shows the small and sorry state of agriculture at FAMU.

> First, that we sell off three of our old horses and purchase two mules so real work can be done on the farm. Mules are best fitted for the farm work of the South.
>
> Second, that we improve our poultry yard by making it larger in stocks and houses.
>
> Third, that we butcher the old bull this fall (Hood is his name).
>
> Fourth, purchase registered boar, and kill the one we have this fall.[31]

Many positive steps were taken to improve agriculture and mechanical arts by President Young, and more money was spent for agricultural and industrial activities than for all other programs combined. In 1922, Young could point to four-year degree-granting programs in Education, Science, Home Economics, Agriculture, and Mechanical Arts. Yet, because Young stressed that the liberal arts were essential as foundations to all academic programs and publicly defended his position, he was summarily removed from his position as president of FAMU. Young in the *Crisis* (September 1923) wrote: "I am *not* leaving them on *theirs* nor on my own. I have become a 'persona non grata' because, forsooth, I refused to sneeze when the local Federal Vocational agents took snuff. I refused to endorse their program for this college . . . to give it a more industrial trend."[32] He further complained that "frantic efforts were made to put A&M College for Negroes into reverse gear, to 'soft-pedal' cultural education as being undesirable for Negroes. They are busy even now trying to make that school function in a way that shall be pleasing to those who have a low-browed conception of the mission of education to the Negro."[33] Young relinquished the administrative reins at FAMU and assumed the presidency of Lincoln University in Missouri.

After a year of virtual anarchy at FAMU during the administration of President W.H.A. Howard, President J.R.E. Lee, who was recommended by the General Education Board, assumed his duties on July 1, 1924. He was a gifted organizational man who had worked with the Urban League as the Extension Secretary and presided over the National Association of Teachers in Colored Schools (American Teachers Association) until 1909. He had worked directly with Booker T. Washington and served as the Director of the Academic Department of Tuskegee until 1915. The latter experience made him particularly desirable to the members of the Board of Control.

Lee was the consummate politician who convinced his Board that the college must be used as an instrument for making life better in the state. Although it was not extension in the federal sense, beginning in 1925, Lee made sure that a type of extension program was available to train in-service teachers and other interested citizens. In addition to the teacher training offerings, the Agricultural and Home Economics Service, under A. A. Turner, reached a large number of citizens. Although these services fell under the Smith-Hughes and state supervision, many of these courses could be used for certification toward the B. S. degree. Lee was also disturbed that the B. S. degree which was being offered fell short of normal standards. So beginning in 1922, a bona fide bachelor's degree program in Agriculture was offered. Regardless of the major, all graduates in agriculture were required to certify in teacher education. It required 65 hours of agriculture, 40 hours of science, 15 hours of English, 8 hours of education, and 8 hours of ethics, sociology, and psychology. The program required 136 hours for 124 credits.

That FAMU was still wearing a dual high school and college badge and graduating relatively few students may be seen in an analysis of its student body in 1930–1931 and 1931–1932. In 1930–1931, the regular session reported more college than high school students—280 college students and 226 high school students. With the new "college" status firmly established, FAMU was able to receive a "B" rating by the Southern Association of Colleges and Schools in 1931 and an "A" rating by the same agency in 1935.

Even though President Lee gave open support to agriculture and mechanical arts, the programs did not grow rapidly at the collegiate level. In 1926–1927, only eleven students were enrolled in the four-year course in agriculture, and during two previous years, only four four-year degrees were granted in agriculture. When the agriculture program was visited by representatives it was recommended that the school should concentrate its efforts on the two-year college level and high school programs and wait until it was better qualified to offer the four-year college program.[34] Of course, President Lee rejected this recommendation and pointed with pride to the fact that 90 percent of college level graduates who became teachers in Florida came from the state-supported institution. Dean B. L. Perry in 1932 indicated that though fifteen different programs (vocational, 4-H courses, 4-H, 4-H clubs, vocational short course, farmers' conferences, etc.), agriculture had served 3,037 persons, although regular college students taking courses numbered only 82. Mechanical Arts could boast that it not only catered to majors but offered courses to the entire student body. The Home Economics

Division was serving 92 majors and extended its service to 1,177 people through organizations like 4-H Clubs and County Short Courses.

On May 15, 1891, the State College for Colored Students, now Delaware State College, (DSC) was established by the 58th General Assembly of the State of Delaware and supported by an appropriation of eight thousand ($8,000) dollars. The language of the Act of Incorporation stipulated that the new college would carry out definitive land-grant functions as required by the Second Morrill Act in a state which maintained separate educational facilities for black and white citizens. The state legislature accepted the provisions of the Act on February 12, 1891, and provided that one fifth of the money received would go to the support of the new college. Thus, Delaware State College was founded directly in response to the demands of the Second Morrill Act.

The new college actually received $4,000 to be raised to $5,000 annually. So on a 100-acre tract of land about two miles from Dover, known as the Lookerman Farm, the college opened for 12 students on February 2, 1892, under the presidency of Professor Wesley P. Webb. The students were able to study in five four-year courses of study: Agriculture, Chemistry, Clinical, Engineering, and Scientific. Although early college documents indicate that these courses led to a bachelor's degree, an analysis of the catalog and of the faculty (which consisted of four, including the president) and of the offerings and physical resources would show that they did not have the ability to deliver bachelor's degrees. In fact, the requirements for admission to the four-year Academic Course of study was the completion of the eighth grade or passing a special examination.

The Catalogue for 1894 listed the following offerings in a four-year course in agriculture: botany, anatomy, entomology, breeding, drainage, dairying, vegetable physiology and pathology, fruit culture, horticulture, soil physics, and microscopic botany. Students were to be given materials in the basic sciences to be applied in different branches of agriculture. Despite the courses listed above, agriculture was a small-time operation. The college farm on which students received practical experience contained an orchard, small fruit plantings and a greenhouse. In 1899, John Boyken Aiken was added as an instructor of agriculture. The next year, he was able to report 564 bushels of wheat from 20 acres, and by 1903, the farm was providing the college with increasingly larger annual incomes as well as food for the students.

Despite the small but increasing annual growth, the Bureau of Education found in 1916 that the school was managed poorly, scholarship standards were low, and the agricultural program consisted of just one teacher in practical and classroom work with three students in attendance.[35] Although the college received limited financial assistance in the amounts of $10,000 from the federal government, $3,000 from the state, and $159 from internal sources, the farm equipment was listed as being good with little use being made of it.

In 1919, DSC acquired 100 additional acres, and with a P. S. DuPont gift of $60,000, the College was able to expand its building program, which included one farmhouse and six barns and sheds, valued at $14,122. Under the administration of President Richard S. Grossley (1923–1942) the College was expanded and upgraded. In 1923, a two-year Junior College Division was added to the college program. In 1925, a two-year Normal Course and a two-year Commercial Course were added to the academic program. However, it was not until 1930 that the Junior College Division offered a two-year curriculum leading to the associate degree in Arts and Sciences and in Agriculture. Two years later, in 1932, DSC established a four-year college curriculum leading to the bachelor's degree in Arts and Sciences, Elementary Education, Home Economics, Agriculture, and Industrial Arts. The first student graduated in June 1934. In preparation for upgrading the institution, a dairy barn was erected, and facilities were added for the expanded four-year collegiate Home Economics Department, which was established in 933–34. As late as 1927, a total of nineteen college-level students were enrolled, but none was majoring in agriculture. In spite of its weaknesses, the institution was seen as meeting its obligations in the field of teacher-training, mechanical arts, and home economics. [36]

When the General Assembly of North Carolina established the North Carolina Agricultural and Technical State University on March 9, 1981 as the A&M College for the "Colored Race," the act stipulated: "That the leading object shall be to teach practical agriculture and the mechanical arts and such branches of learning related thereto, not excluding academical and classical instruction."[37] The creation of the new college was done to make the state eligible for funds under the Second Morrill Act of 1890 which required that states with biracial school systems would have to make separate provisions for the black race.

Actually, the college began operating in 1890–91 before the passage of the law creating it. In order for the A&M College for whites, which was established by the State Legislature in 1889, to receive its funds, a college for blacks had to be established. Accordingly, the Board of Trustees of the A&M College in Raleigh was empowered to make temporary arrangement for black students. A plan was worked out with Shaw University in Raleigh where the college operated as an annex to Shaw University during the years 1890–1891, 1891–1892, and 1892–1893.[38]

As a follow-up to the legislative act creating the College in 1891, a group of influential citizens of Greensboro donated fourteen acres of land off East Market Street and $11,000 to encourage the location of the A&M College in Greensboro. This amount was supplemented by an appropriation of $2,500 from the General Assembly, and by 1893 the first building was erected and Dr. J. O. Crosby was elected as the first president.[39]

In keeping with the mission, President Crosby created two departments, namely, the Department of Agriculture and the Department of Mechanic Arts, with an efficient professor at the head of each. Both President Crosby (1891–1896) and President James B. Dudley (1896–1925) attempted to walk the tightrope in offering classical and liberal education while satisfying the demand of most white Southern leaders that blacks be given practical education in the industries. Under Crosby, the university's record shows that seven bachelor's degrees were offered in 1899 and thereafter there were some bachelor's degrees in Agriculture awarded; however, the university reverted to a normal status until it became a four-year degree-granting institution in 1922. In 1908, President Dudley gave this statement in showing that blacks must improve economically:

> The Negro in North Carolina owns 53.996 farms or 7.2 per cent of the total number of farms in the State. These farms contain 2,893,200 acres of land, or 7.6 percent of the total farm acres in the State. If

> production of the Negro farm acreage in North Carolina could be increased $1.04 per acre, it would increase the productive capacity of the State by $3,000,000.[40]

While Dudley believed that the future of the black race was through the demonstration of industry in agriculture, home economics, engineering, the sciences and teaching, he emphasized the development of the mind as well. The curricula at the College during the early years emphasized bricklaying, auto mechanics, shoemaking, animal husbandry, mattress and broom making, blacksmithing, horticulture, floriculture, carpentry, poultry raising, tailoring, wood turning, electrical engineering, and domestic science as well as teacher training.[41] Although Dudley encouraged liberal arts, he believed that "the liberal subjects were designed to strengthen practical programs in Land-Grant Colleges, never to supplant them or overshadow them."[42] Thus, he endeavored to stay within the bounds of his understanding of the Second Morrill Act. Because of his strong emphasis on agricultural and engineering pursuits, liberal arts advocates often referred to the institution as a "Cow College."

By 1913, federal contributions to the College had increased to $30,754, while state appropriations were $12,614. The value of buildings was estimated as $227,000, which included an agricultural building, dairy, and two barns. Farm equipment and livestock were valued at $3,000. In 1915, Bureau of Education investigators found instruction in agriculture to be good, but believed the time allotted for study was too short. Investigators further recommended that special students in agriculture be given time for practical work in farming, to include tillage, cultivation, spraying, harvesting, and marketing.[43]

With these and other improvements in agriculture and the industries, in 1915 the name was changed to the Agricultural and Technical College of North Carolina by an act of the state legislature. As in most black land-grant colleges, as federal appropriations increased, state appropriations decreased. Professor Louis Harlan wrote: "The Negro Agricultural and Technical College at Greensboro received $19,000 in 1915–16, one-thirteenth of the total state appropriation for colleges and universities. Public higher education for Negroes was almost non-existent."[44]

With the small number of blacks graduating from secondary schools in North Carolina, and with inadequate appropriations from the state, A&T, like other 1890 institutions, offered mostly secondary and normal training until 1922. According to Schor: "The number of degrees in agriculture granted (by A&T) . . . was: twelve in 1923–24, seven in 1924–25, and six in 1926 . . . "[45] The faculty in agriculture then consisted of three professors, one associate professor, and one instructor. Since the Department of Education of North Carolina had granted recognition of four-year college training in teacher education only, agriculture graduates were certified in teacher education.

Under the new president, F. D. Bluford, (1930–1955) A&T College was approved as Class "B" by the Southern Association of Colleges and Schools (SACS) in 1931, and elevated to Class "A" in 1936. During the 1936–37 academic year, the College reported an enrollment of 674 students with 100 in agriculture at the college level. This was reputed to be the largest such enrollment in agriculture of any 1890 institution in the country. Also, during 1939, graduate education leading to the master of science degree was authorized by the state legislature in education and in limited other fields, and the first master's degree was awarded in 1941.

Land-grant functions did not come initially to blacks in the State of Georgia through Fort Valley State College but through "The Georgia State Industrial College for Colored Youths," now Savannah State College. By act of the General Assembly on November 26, 1890, the State of Georgia provided that "There shall be established in connection with the State university, and forming one of the departments thereof, a school for the education and training of colored students."[46] Instead of land scrips for the black institution, the state appropriated $8,000 in lieu of land thus making the Georgia State Industrial College for Colored Youths a land-grant institution.

By a joint resolution on November 26, 1890, the State of Georgia accepted the terms of the Morrill Act of 1890 and provided that "one-third of said funds shall be for the colored students and two-thirds for the whites . . . "[47] The first principal of the school was Major Richard R. Wright who developed the new school with the assistance of three other instructors. While the new school's programs were primarily classical in nature, Wright made certain that land-grant functions were carried out. In 1891, the school had a superintendent of the mechanical arts and a foreman of the farm. During the thirty years, 1890–1920, training in agriculture was not only offered in the classroom, but Wright initiated the practice of Farmers Conferences at other places in Georgia in the early 1880's.

In 1931, the college began offering bachelor degree programs with majors in English, the natural sciences, social sciences, business administration, as well as agriculture and home economics. The land-grant functions were transferred to Fort Valley State College in 1947, and the Board of Regents changed the name from Georgia State College to Savannah State College on January 18, 1950.

The Fort Valley High and Industrial School, chartered in 1895, and the State Teachers and Agricultural College of Forsyth, founded in 1902, were consolidated in 1939 to form the Fort Valley State College. Although the school emphasized teacher training, "one of its principal educational objectives was training in manual and technical skills for youths.[48] Under Henry A. Hunt, the second principal of Fort Valley High, increased agricultural emphasis was brought to the school's curriculum. In 1932, two years of college work was added and the name was changed to Fort Valley Normal and Industrial School, with a bona fide junior college curriculum.

In 1939, the Fort Valley Normal and Industrial School came under state control as a unit of the University System of Georgia. When the state assumed control of the school, it was merged with the State Teachers and Agricultural College at Forsyth to form the Fort Valley State College, with Dr. Horace Mann Bond as the four-year college's first president. A special committee (the Strayer Committee) named by the University System of Georgia recommended the establishment of a four-year School of Agriculture in Fort Valley.[49]

The Strayer Committee, feeling that FVSC was "in a position to develop a sound program in the field of general agriculture as a basis for the preparation of teachers of Vocational Agriculture" recommended that

> Fort Valley State College be developed distinctly as the State College for Negroes in the fields of agriculture and home economics, and it should be the only institution for Negroes that looks forward to granting the Master's Degree in these fields . . . that the Fort Valley State College should give much greater emphasis than at present upon the fields of agriculture, including terminal and short courses of less than four year's duration related directly to employment in the various agricultural occupations, and that the preparation of agricultural extension and home demonstration agents should be limited to this institution.[50]

On the basis of these recommendations, on February 25, 1949, the General Assembly of Georgia provided: "That Fort Valley State College, Fort Valley, Georgia, is hereby designated by the General Assembly of the State of Georgia as the land-grant college for the members of the colored race instead of Georgia State College, Savannah, Georgia."[51] With this bill, all Morrill funds for the promotion of land-grant functions were transferred from Savannah to Fort Valley. It should be noted that the Board of Regents had announced the transfer of land-grant functions in the fall of 1947; however, the Georgia legislature did not officially designate FVSC as the land-grant college until 1949.

The first college level program in agriculture was initiated in September 1941. The staff consisted of two instructors, and eight of the 130 students enrolled in FVSC were studying agriculture. In 1945, the Board of Regents authorized FSVC to initiate a four-year program designed "to select, train, place, and follow up all students who desire, and who can profit by training in Agriculture."

During the late 1940's and early 1950's, primary emphasis in the Department was that of training teachers of agriculture. This emphasis was due largely to the fact that employment opportunities for blacks in agriculture in Georgia were almost solely restricted to vocational agriculture. Full membership in the Southern Association of Colleges and Schools was achieved in 1957, and a Graduate Division was established as well. FSVC became a member of the National Association for the Accreditation of Teacher Education in 1971.

Langston University is Oklahoma's only historically black college. It became a land-grant college to satisfy the provisions of the Morrill Act of 1890 when House Bill 151, which was guided through the state legislature by Henry S. Johnson, became law on March 12, 1897. The Bill provided that:

> The Colored Agricultural and Normal University of the Territory of Oklahoma is hereby located and established at or within a convenient distance from Langston, in Logan County, Oklahoma Territory, the exclusive purpose of which shall be the instruction of both male and female colored persons in the art of teaching and various branches which pertain to a common school education; and in such higher education as may be deemed advisable by the Board, and in the fundamental laws of the United States, in the rights and duties of citizens and in the Agricultural, Mechanical, and Industrial Arts.[52]

Although the Oklahoma State Legislature approved the Morrill Act on October 27, 1890, it was not until March 10, 1899, that the legislature divided the funds, giving nine-tenths to the Agricultural and Mechanical College at Stillwater and the residue of said money granted to the Colored Normal and Agricultural University.

In keeping with legislature mandate, Langston University was placed in the all-black town of Langston, which had previously been promoted as the "Black Mecca" and "Little Africa." Both the town and the school were named after John Mercer Langston, who became a symbol of the highest form of education in America, having served as a dean of Howard University's School of Law, a general counsel to the Republic of Haiti, a president of Virginia State University, and a member of the United States Congress from Virginia. Although the University of Langston, Oklahoma, was legally named the Colored Agricultural and Normal University, it was always popularly called Langston University. (The name was officially changed in 1941 by an act of the Oklahoma Legislature.)[53] So Langston University, Oklahoma's black land-grant college, began operating on September 3, 1898, in the local Presbyterian church, under the presidency of Professor Inman E. Page.

Agriculture at Langston had a strong foothold from the beginning years of the college. Courses that were taught included farm equipment, shopwork, and farm building. By 1900, courses for women in home economics were added to the curriculum. In 1904, a mechanical arts building was constructed, and a program designed to assist practical farmers was established. This one-year plan included courses of study such as carpentry, blacksmithing, stock judging, butter making, dairy inspection and laws, and milk testing.[54] While the catalogue indicated that the B.S. degree could be acquired, in fact the bona fide four-year B.S. degree was not awarded until 1924.

The school owned and operated a large farm of over 300 acres throughout its first 33 years. But for more than two decades, the training was essentially at the high school and normal levels with major emphasis on teacher education, with continually expanding interests in agriculture, mechanical arts, and home economics. Langston's historian, Professor Zella J. Black Patterson, indicated that there was little significant change in agriculture at Langston until around the 1920's.[55]

Beginning in the early 1920's, the college curriculum in agriculture was expanded under its first dean, John E. Buford, to enable the school to offer a four-year bachelor's degree. The first student to graduate with a bachelor of science in agriculture was Thomas Herbert Black, Jr. in May 1924. After teaching in several public schools, he served as a county agent in Lincoln and Logan Counties. In 1926–28, a team of agriculture professors including W.M.T. Wells, D.C. Jones, D.W. Lee, and Eugene Moore gave increasing stability to the Agriculture Department. For many years, Professor Jones was also the state supervisor of black vocational high school agricultural teachers. By 928, students had the option of majoring in agricultural education, agronomy, or animal husbandry. Before a student could receive a degree, he had to have six months of practical farming experience and fifty hours of supervised practice teaching.[56]

By 1932, Langston was on its way to becoming an outstanding land-grant institution. It was during this year that the two-year normal school was closed, and four years later in 1936, free tuition for Oklahoma students was terminated. The campus farm had grown to four hundred acres. The school had Jersey and Holstein cattle; Duroc and Poland China swine; four hundred laying hens; turkeys and geese; and Percheron brood mares and colts and mules. The poultry farm had chickens of five different breeds. The incubator capacity was 2,016 chicks, and approximately 40,000 chickens and 200 turkeys were produced each year.[57]

In 1940, the Agriculture Department had four brick buildings for classrooms, extension offices, crop and soil labs, and workrooms. Under the leadership of Dean M. F. Spaulding, the first holder of the Ph.D. degree to head the Agriculture Division, the institution intensified and expanded its land-grant functions. Langston Normal was designated a fully accredited state university by the Oklahoma Legislature in 1941 and renamed Langston University. Enrollment in agriculture was low during the early years; however, by 1942, ten $50 agricultural scholarships were available to entering freshmen.

The State of Tennessee was slow to make a commitment to land-grant education for blacks as it had done for whites in 1869 with the establishment of the University of Tennessee under the Morrill Act of 1862. However, the state accepted the provisions of the Second Morrill Act on February 26, 1891 and stipulated that it "empowers the treasurer of the University of Tennessee to accept the whole of said grants of money authorized by said act to be paid in the State of Tennessee, and to give his official receipt for same."[58] Since the Morrill Act of 1890 required that equitable provisions be made for the education of blacks, and since blacks could not attend the University of Tennessee, other provisions for their training had to be made.

In an effort to meet black citizens' demands for a land-grant education, the state assigned the funds to Knoxville College in Knoxville, which was founded in 1875 as an outgrowth of the missionary efforts of the United Presbyterian Church of North America. In 1891, Knoxville College was designated by the State of Tennessee to provide agricultural and industrial training for black students. With funds provided under the Second Morrill Act, the college built and equipped facilities for training in mechanical arts and agriculture. Although the College never placed strong emphasis on agricultural and vocational training, it provided a semblance of land-grant education for blacks until 1912, when the land-grant functions were transferred to what is now Tennessee State University.

On April 20,1909, after much agitation and debate on the merits and demerits of a state-supported land-grant institution for blacks, the General Assembly passed an act providing for three normal schools, one of which was the Agricultural and Industrial Normal School for

Negroes. The name agricultural and industrial enabled the school to serve conjointly as the state's normal school and as the land-grant institution for black people. Due to the influence of Henry Allen Boyd, editor of The Nashville Globe and Independent, a special session of the legislature placed the normal school in Nashville for the following reasons:

> There will be but one Negro State College in Tennessee for the next one hundred years, and if the school is located in the center of the state where his Excellency, the Governor, Members of the State Senate, Members of the Lower House, the State Education Board and this County Court can see the property almost any day by just the mere payment of street car fare, it will be one of the greatest educational institutions in the South for Negroes.[59]

Boyd, a supporter and initiator of the idea of a land-grant college for blacks foundations further emphasized that blacks had been "deprived of the first and second Morrill Fund, the Slater Fund, and several other philanthropic foundation assistance that should have come to us."[60] So with his appeal and with $100,000 made available by the state for this purpose, the normal school which developed into Tennessee State University began in Nashville. However, it was not until June 12, 1912 that the school opened formally with 247 students and thirteen teachers under the principalship/presidency of William Jasper Hale, who served until 1943.

Like most other black land-grant colleges, Tennessee State University was required to maintain a grammar school and secondary school, and later a two-year normal certificate. Thus, the courses in agriculture and science were taught by Professor J. Thomas Caruthers, and the college farm was supervised by Benjamin F. Carr between 1913 and 1921. All students above the grammar grade were required to take at least one course in agriculture.

In 1922, the institution was raised to the level of a four-year teachers college and was empowered to grant the bachelor's degree. The first degree was awarded in 1924. At that time, the "normal" designation was dropped from the name of the college. Although established as a land-grant institution, its stated purpose was ". . . preparing colored teachers and leaders to meet fully the demand for more efficient and practical service in the public schools and life . . . grasp their economic opportunity in becoming community leaders, farmers, and teachers."[61]

Improvements in agriculture occurred after 1920. By 1925, the physical plant in agriculture alone consisted of a 178-acre farm, offices for the extension workers, laboratories for vocational workers, a greenhouse as headquarters for the Floriculture Division of the Agricultural Department, and a place for growth for the Truck Garden Division, a dairy barn for the dairy head and the conversion of dairy products, and a farm building as headquarters for general farming operations. Livestock was maintained by students as a part of their training.

Between 1925 and 1927, the institution, called Tennessee Agricultural and Industrial State Teachers College until 1934–35, had the agriculture curriculum substantially strengthened. The four-year curriculum in vocational agriculture consisted of plant production for the first year, i.e., judging of plants, the relation of plants to soil and fertilizers, seed testing and farm accounting. The second year offered animal production; the third year involved studies in horticulture, dairying, prices and production, cover crops, and soil preparation; and the fourth year entailed studies in farm management and engineering, farm records, layout, contracts, insurance, cement construction and farm machinery. That a bona fide bachelor's degree was being offered may be seen in admission requirements of four years from a high school, and a requirement of 192 quarter hours for graduation. However, with this apparently sound program, Professor Lloyd, the college historian, found that in 1927, Michigan State College required Tennessee A & I students to take an additional year's work before being admitted. Although in 1927 247 students were enrolled in vocational agriculture courses, very few graduated in agriculture. For example, one student graduated in 1924 and three in 1925. So in the 1920's, very few students graduated in agriculture.

The General Assembly authorized the State Board of Education to upgrade substantially the educational program leading to the master's degree. The graduate curricula were first offered in various fields of teacher education. The first master's degree was awarded in 1944. Two years later, in 1946, the institution was accredited by the Southern Association of College and Schools.

West Virginia State College (WVSC) was created in direct response to the Second Morrill Act which required the state to provide education for black youth as well as white or face the loss of federal aid for its agricultural and mechanical colleges. Thus, by an act of the legislature March 17, 1891, the State of West Virginia accepted the terms of the Second Morrill Act and designated the West Virginia Colored Institute (now West Virginia State College) as the school for black students. In support of the new school, the state indicated that it would provide "$3,000 per annum for five years, and after that time $5,000 as long as the appropriation continues."[62] Of the $18,000 from these federal funds, five-sixths or $15,000 went to West Virginia University. The distribution was made according to the ratio of black to white children of school age as shown by the census.

With a state appropriation of $10,000, on May 3, 1892, the school opened formally with twenty students enrolled. The four courses of study were: agricultural, mechanical, normal and preparatory, each of three years' length. A barn was erected at a cost of $500; however, there was very little money to develop agriculture. The first instructor in agriculture, Austin W. Curtis, a graduate of the Agricultural and Mechanical College of North Carolina, joined the faculty in 1900 and was assisted by R. W. James and W. S. Brown. A four-year course leading to a diploma was initiated that year which included offerings in general agriculture, horticulture, rotation crops, stock breeding, soil and fertilizer, market gardening, dairying, poultry science and veterinary science. Since most students were below the secondary level, these courses were in practical agriculture and not scientific agriculture at the collegiate level.[63]

When John W. Davis became president on August 1, 1919, he gave the school outstanding leadership, wrote significant and influential articles on the black land-grant system and was among the foremost spokesmen and president in 1938 of the Conference of Presidents of Negro Land-Grant Colleges. He led WVSC to a four-year program in 1919–20, and to accreditation by the North Central Association of Colleges and Secondary Schools in 1927. From 1922 to 1927, the state was relatively generous in its appropriations. The institution received $10,000 annually from the federal government, and by 1927 was receiving

$255,000 in its educational and general budget and $775,000 for capital outlay including building and grounds.

The bachelor's degree program in agriculture was strong, requiring 128 semester hours, of which 45 hours were in agriculture. The enrollment in agriculture remained small despite the well-rounded, sophisticated program. For example, in 1927 only nine were enrolled in collegiate degree programs in agriculture.

Despite the fact that President John W. Davis was an ardent supporter of black land-grant institutions and had gained great respect for himself and his institution through his writings and the Conference of Presidents of Negro Land-Grant Colleges, WVSC was the first of the black land-grant institutions to feel the negative impact of the *Brown v Board of Education* decision declaring segregation in public schools unconstitutional. In its effort to establish a unitary system of education, the State of West Virginia commissioned a study in 1955 which resulted in the transferring of land-grant functions to West Virginia University. In turn, WVSU was to receive a pre-engineering program to compensate for the loss. The recommendations which were ultimately adopted are cited below:

> The functions performed under the Land-Grant Acts should be located exclusively at West Virginia University and all federal funds received for this purpose should be spent at the University. It is educationally sound and good public policy for the land-grant function to be the responsibility of one institution. The proposed change is a normal result of racial integration. The Legislature should, however, provide additional state appropriations for West Virginia State College to compensate for the loss of federal funds provided through the land-grant program. Otherwise, the change would be financially crippling to the institution.
>
> The preprofessional program in engineering at West Virginia State College should be strengthened. West Virginia State College is located in the very heart of the industrial area that employs many engineers and engineering technicians. Because of the need for engineers in this area and in order to compensate somewhat for its losses in agriculture, the engineering offerings at the college should be strengthened until they are equivalent to the first two years of engineering at the University. In addition, the college should offer in-service courses in engineering for personnel in the area and should modify its terminal and vocational programs so that they genuinely prepare individuals for industrial employment.[64]

When the state accepted and adopted the recommendations shown above, West Virginia ceased to be labeled as a land-grant institution since all of the 1890 funds and functions were transferred to West Virginia University in 1957. With the loss of land-grant status by West Virginia, the number of black land-grant colleges decreased to sixteen, along with Tuskegee University, a functional land-grant institution.

As can be seen from previous pages, there was no uniformity in the development of black land-grant colleges or in the distributions of federal funds by the states in which they were located. While four states—Mississippi, Virginia, South Carolina, and Kentucky—gave support to black land-grant education from funds derived from the Morrill Act of 1862, these funds were proportionately decreased as funds became available under the Morrill Act of 1890. Some states used existing private schools from 1862 and 1890 funds for land-grant emphasis for blacks, others expanded existing public institutions, while six states almost immediately established new land-grant colleges under state control. In one way or another, within three years after the passage of the Morrill Act of 1890, each of the seventeen Southern and border states were providing land-grant education for black citizens.

The early history of each of the 1890 institutions was a struggle for survival. Since there were such a small number of black high schools operating and so few graduates academically prepared for collegiate work, most of the 1890 institutions were forced to concentrate on elementary, secondary, and normal school offerings. It was not until the 1920's that these colleges could begin offering a B.S. degree in the field of Agriculture, Home Economics, and other fields. Additionally, since blacks had worked during slavery in the fields of the South with few rewards, most tended to lean toward cultural instruction in the liberal arts which was the hallmark of denominational and private institutions. However, with the aid of philanthropic groups, 1890 land-grant institutions were able to receive essential personnel, facilities, and curricula offerings to enable them to develop into sound collegiate institutions, with more college than high school students in the early 1930's. Basically, the early 1890 institutions were run by a paternalistic president or principal on whose shoulders the responsibility of developing a college rested.

CHAPTER FOUR

Strength In Unity: The Conference Of Presidents Of Negro Land-Grant Colleges, 1923–1955

THIRTY-THREE years after black state-supported colleges were officially made recipients of land-grant funds by the Second Morrill Act of 1890, the seventeen presidents of these black colleges came together and formed an association to permit and encourage them to work collectively on concerns of mutual interest. From the turn of the century, black land-grant colleges had a tenuous alliance with the all-white Association of Agricultural Colleges and Experimental Stations, a group which sometimes used its considerable power to support the black land-grant system. However, the relationship was predicated on a paternalism reinforced by legal segregation; thus, black professionals could not participate as equals. Joel Schor maintains that "blacks were either forced out of the Association or discouraged from participation."[1] While there was interaction through committees between the black colleges and the Association of Agricultural Colleges and Experimental Stations so that the complaints of black institutions could be heard, it became increasingly obvious that black institutions needed their own organization.

At the Southern Conference on Education in Negro Land-Grant Colleges, held at Tuskegee Institute, Tuskegee, Alabama, January 15–16, 1923, an Association of Negro Land-Grant Colleges was formed.[2] This organization was created in response to a report of the Committee on Organization and Policy which was composed of the administrative officials of these colleges. The report recommended "that there be established an association of Negro Land-Grant officials, or their representatives, and of the several departments of the Federal Government administering activities connected with Land-Grant Colleges."[3] It was further recommended "that the chief administrative officers of the Land-Grant Colleges and of Hampton Institute and of Tuskegee Institute be honorary members of this association . . . (and) that a meeting of this association shall be held annually, the date and place to be determined by the Executive Committee."[4] So from the very beginning, the Association was not exclusively a land-grant organization, but a joint effort with leading private institutions.

Although the purposes of the Association were not as clearly delineated as those of many such organizations, a major purpose was to discover and pursue problems common to the Negro land-grant colleges. Orr's analysis of purpose stressed the following as the guiding forces for the Conference:

> The members of the Conference seemed to be most interested in hearing about the work of other Conference presidents during the early years of this organization. It appears that they were attempting to analyze and evaluate their own individual schools on the basis of what was being carried out in the majority of the Negro Land-Grant colleges. The interest and concern of the entire group were to develop a strong organization which could serve each of its member schools objectively and impartially. The free exchange of ideas and the willingness of each member to contribute and to accept the contributions of others portrayed the enthusiasm which was evident from the beginning.[5]

The first slate of officers of the new organization was as follows: John M. Gandy, President, Virginia Normal and Industrial Institute; Nathan B. Young, Vice-President, Florida Agricultural and Mechanical College for Negroes; Executive Committee: John W. Davis, West Virginia State College; J. B. Dudley, North Carolina A&T; and Thomas H. Kiah, Princess Anne Academy in Maryland. Although each member school was asked to offer suggestions to the newly-elected officers which might clarify the functions of the new organization, the record does not indicate that any suggestions came forth. The Association met one year later at Hampton Institute, March 3–5, 1924, and the name was changed to the Conference of Presidents of Negro Land-Grant

Colleges, a name that was retained throughout the thirty-two year history of its existence.

The establishment of the Conference of Presidents of Negro Land-Grant Colleges did not mean an end to these schools' relationships with the Association of Land-Grant Colleges and Universities. Under the leadership of John W. Davis of West Virginia State, a standing committee of black land-grant presidents was created to report its findings to the Association. Likewise, the Association created a standing committee to meet with its black counterpart on a regular basis. In 1926, a Joint Committee of the Association and the Conference of Presidents came into existence, the purpose of which was to report to the larger body its findings as to the progress of Negro land-grant education. Subsequently, "steering committees" were established and were granted the opportunity of reporting on matters of common interest at each annual Association meeting. The members of this first newly formed committee were: John W. Davis, John M. Gandy, A. F. Woods of the University of Maryland; Walton C. Johns, U. S. Bureau of Education; Emeline S. Whitcomb, U. S. Bureau of Home Economics; and E. C. Brooks of the University of North Carolina.[6] Although this was a condescending and somewhat demeaning pattern of identification with the Association, it was perhaps the only vehicle through which the Conference could get a national audience at that time.

The early years of the Conference showed that much of the energy of the presidents was spent trying to gain recognition and respect for their colleges as legitimate institutions of higher learning. The meeting of the Conference held in Washington on May 10–11, 1926 in the auditorium of the Department of the Interior and at the Whitelaw Hotel issued recommendations which reflected these concerns. Among the most notable ones were: that the governors of the southern states place the colleges under the control of state boards consisting of persons of training, interest, and sympathy for black education and providing definite programs and appropriate supervision; that responsibility for the operating of the colleges be given to the college presidents, supported by a system of accounts and audits; that some policy be set as to course of study and extent of work to be undertaken based upon the needs of the communities involved, and that minimum equipment "expressed in dollars," be specified for the work in such courses; that the presidents recommend candidates for the necessary positions, and that those employed be given a chance to succeed; and that there be more liberal use of travel allowances for presidents and teachers.[7]

In the mid-thirties, the Conference began to focus on curriculum problems, instructional improvement and supervisory programs, especially with reference to vocational and agricultural opportunities for blacks. Like most social institutions, black land-grant colleges were seriously hurt by low enrollment patterns during the Great Depression. At a meeting of the Conference in 1932, presidents complained that "there are more applications received from teachers wanting positions than from students seeking entrance." Despite the years of "hard times and hard tomatoes", outstanding consultants specializing in the various areas of need were invited to annual meetings to discuss problems of interest to all members.

At the 13th annual meeting of the Conference in Washington, D.C. in November 1935, the overall topic was "The Need of the Negro Land-Grant Colleges." In addition to attendance by all of the presidents, there were eight guest speakers, including the Honorable Henry A. Wallace, Secretary of Agriculture. Eugene Knicles Jones, Advisor on Negro Affairs, in "Studying Vocational Opportunities for Negroes," U.S. Department of Commerce, emphasized that in order for black Americans to be prepared to take advantage of increasing opportunities, black land-grant colleges must have the resources and personnel to properly prepare students and to carry out programs in various communities. He outlined as crucial the appointment in each black land-grant college of a field agent whose chief duties should be (1) a compilation of types of occupations open to young Negroes in the respective states; (2) the placing of graduates in positions giving apprenticeship privileges, and (3) the institution of a follow-up system to check on the progress of graduates in the development of vocations and to advise them in their respective vocations. He further advised that these colleges should hold annual conferences which would emphasize such things as consumer cooperatives, growers' cooperatives, credit unions, agricultural economics, small farm ownership, and diversification of crops.[8]

At this annual meeting of the Conference there was ample advice on how to improve the curriculum, but there was little discussion on the lack of resources or criticism of state and federal agencies for not providing them. For example, Erwin H. Shinn of the Extension Service of the U. S. Department of Agriculture spoke on "Professional Training for Negro Extension Work." He maintained that the objectives of the agriculture and home economics curricula of these colleges should be: (1) to train teachers of agriculture, home economics, and the related sciences for both college and secondary positions; (2) to train extension workers in agriculture and home economics and to some extent subject matter specialists in these fields; and (3) to train for practical farming and farm homemaking and other pursuits closely related to these fields on a scientific basis.[9]

In looking at expectations in the realistic light of human and economic resources, President R. B. Atwood of Kentucky pointed to the limited curriculum in black land-grant colleges. He stressed that the agricultural curriculum was pursued, as a rule, by young men who aspired to become teachers of agriculture in Smith-Hughes high schools, principals of county training schools, county agriculture extension agents, or farm operators. He complained that enrollment and lack of adequate appropriations had virtually prevented all black colleges from providing strong majors and minors in specialized fields of agriculture. He ended his presentation with this statement:

> It seems to me that a good strong, general course dealing briefly with animal husbandry, field crops, vegetable growing, dairying, farm management, farm economics, rural sociology, diseases of plants and animals, poultry husbandry, with special emphasis upon the practical skills connected with farming is the recommended procedure for most of our colleges. Professional courses can be added for those who are planning to teach.[10]

Black college presidents did not take the criticism of their programs without trying to call to the nation's attention their needs. In a letter to the Honorable Henry A. Wallace the presidents complained that: "The magnitude of the educational program for white citizens may attract so much attention that attention is distracted from how little is being done for the Negro citizens." The letter further states that "All of this may happen unwittingly, but the fact remains that as the program for white citizens proceeds and expands, the program for Negro citizens lags behind, and at a low level. The minds of many citizens, both white and colored, become confused and then, sometimes complacent; we assume that all is well with our citizens; what is generally considered to be everybody's business turns out to be nobody's business –and the Negro suffers."[11]

The above complaints were undergirded by research data compiled by Dr. John W. Davis. His research showed that:

(1) On the basis of percentage of rural population, the amount of money expended in the seventeen states for cooperative extension among Negroes is annually more than $2,800,000 less than it should be.

(2) On the basis of percentage of rural population, the number of Negro extension workers in the seventeen states is 396 less than it should be, or less than half of what it should be.

(3) Not one of the states which supports a separate Land-Grant College for Negroes has established an agricultural experiment sub-station in connection with the institution for Negroes.

(4) Not one of the states which supports a separate Land-Grant College for Negroes has established a graduate or professional school at the institution for Negroes.[12]

All federal funds were allotted to the states on the basis of the percentage of the state's rural population as a whole. Although in the southern states blacks constituted a large percentage of the rural population, the funds for cooperative agriculture, home economics, trade extension, experiment stations, and 4-H work which constituted the supporting wall of higher agricultural training were not allotted on an equitable basis for blacks. Furthermore, legal segregation, which sanctioned racial injustice, did not encourage or permit the system to come under open scrutiny. Thus black land-grant colleges generally trained agricultural and home economics teachers for the classrooms and lower level jobs in extension and agricultural services.

In Orr's study of the Conference he found that in the 1940's the presidents seemed mainly concerned with three major problems: expanding curriculum area concentrations so as to better prepare students for a wider variety of opportunities; seeking equal opportunities for graduates who had been denied positions because of their color; finding effective methods of adjusting to social change that was taking place throughout the country.[13]

The Nineteenth Annual Conference of Negro Land-Grant Colleges, held at the Wabash Avenue Y.M.C.A. in Chicago in 1941, had as its theme "Cooperation with Federal Agencies with Particular Reference to Agricultural Extension Services, and the National Defense Program." Thomas N. Roberts, a special assistant to the director of Personnel, U.S. Department of Agriculture, spoke on the topic, "Training for Employment in the United States Department of Agriculture." He pointed out that blacks were woefully underrepresented in the U.S.D.A. "On June 30, 1941, there were 89,511 employees in the United States Department of Agriculture. Of this number, 12,738 were employed in Washington and 76,773 in field offices . . . Of the 89,511 employees in the Department of Agriculture, 684 are Negroes; 246 are employed in the Washington office and 438 in field operations of the Department."[14] These figures did not include 570 Extension workers. A further analysis of USDA's employment pattern showed that blacks were in only sixty-five of the 2,000 different job classifications in the Department. Blacks were mainly in two of thirty-one bureaus–U. S. Extension Service and Farm Security Administration, and their representation in the other bureaus was almost infinitesimal.[15]

Despite this tremendous imbalance in black employment as compared to white, there was absolutely no criticism of racism as one of the causes. Rather, black colleges were admonished to strengthen and expand their curricula, borrow officials from the USDA as consultants, and have students take junior professional examinations during the third year. There was no suggestion that the USDA should reach out and make a specific effort to recruit more blacks for its bureaus.

On June 12–14, 1942, all of the presidents of black land-grant colleges met at Hampton Institute to consider a proposal by Dr. W.E.B. DuBois that black institutions become more alert to the impact of the nation's entry into the war and to the intensification of economic and social change. Working under the conference theme, "National Planning for the Prosecution and Winning of the War, Long Time Issues of Postwar Collapse and Reconstruction, and Their Effects Upon the

Negro Land-Grant Colleges,"[16] the presidents wrestled with the questions of how to involve their institutions and students in the three major problem areas for the nation: armed forces, war industries, and agriculture. Maintaining that "skills are the only consideration in placing individuals in jobs; and that race, religion, etc. should not enter the picture,"[17] they openly sought job opportunities for blacks on the basis of their qualifications.

The quality of this conference may be measured in part by the stature of the national leaders who addressed the presidents. Among these were: John Corson, Director of U.S. Employment Service; Lieutenant-Commander E. H. Downs, U. S. Navy; William Wynne, National Resources Planning Board; Dr. Joseph R. Houchins, U.S. Census Bureau; George Johnson, Fair Employment Practices Commission; Dr. Thomas Roberts, U. S. Department of Agriculture; Dr. Robert Weaver, War Manpower Commission; Dr. Alonzo Myers, Professor of Education, New York University; Judge William H. Hastie, U. S. War Department; and Dr. M. M. Chambers, American Council on Education. The major emphasis of these presenters centered around the progress that had been made in their areas, the new avenues for participation being opened up to black people, and the methods that might be used by black colleges to help prepare students for these emerging opportunities after President Roosevelt announced Executive Order 8802 banning discrimination in federal employment.

Of special concern to the presidents was the fact that the U. S. Department of Agriculture had employed blacks primarily in custodial positions. In an effort to change this condition, Dr. Thomas Roberts proposed that "the Land-Grant Colleges send representatives . . . to the Department in Washington, D.C. for a ten-day period. There, the nature of the work done in the Department would be studied and the representatives would return to their colleges and introduce relevant curricular changes, with the view of training students for such work."[18] A vehement protest was also levied by the Conference of Presidents against the exclusion of black students from the Navy's V-1 program which was designed to provide officer candidates for the Navy out of quotas of college students. The president stated: "The Navy not only refused to recognize any Negro colleges as participating in the V-1 program, but further refused to permit a Negro student enrolled in a white college, which has been recognized as participating, to take advantage of the V-1 program."[19] In order to communicate forcefully to the Navy the extent of their discontent, a committee headed by President John W. Davis of West Virginia State College was appointed to carry the Conference's protest all the way to the Navy Department. Although the case was effectively presented on June 23, 1942, the Assistant Secretary of the Navy, Addison Walker, and Dean Barker, Head of the Navy Training Program, insisted that "the Navy had not worked out a plan for the use of Negro officers and that the Navy was not disposed to train men for officers and then not use them."[20] The meeting came to an end with black committee members agreeing that "the Navy had not opened the way for Negroes to become commissioned officers." Yet this effort on the part of the Conference is evidence of the persistence of land-grant presidents attempting to bring new opportunities to their institutions.

Black college presidents increasingly called for more funds and began to point out with greater intensity that blacks were not sharing equitably in funds designated for land-grant colleges. They emphasized that although blacks comprised 25 percent of the total population in the 17 states in which black land-grant colleges were located, those black institutions received only five percent of the funds. In order to better contribute to the postwar economy and to other social and political needs of blacks, they decided to go to the very highest level for assistance.

Representatives of the Conference of Negro Land-Grant Colleges were granted an audience with President Harry S. Truman on October 22, 1946. In the aftermath of World War II and in light of gains that blacks had made during the War, the representatives wanted Truman to know that black colleges were willing and ready to help solve the educational problems that lay ahead. In a prepared statement presented by Drs. Sherman D. Scruggs of Lincoln University, Rufus B. Atwood of Kentucky State College, and John W. Davis of West Virginia State College, they emphasized:

> We represent officially the publicly-supported land grant colleges of seventeen southern states in which approximately seventy-five percent of the Negroes of America live . . . The progress of these colleges is important to the advancement of the South and the

> Nation. They are located in states which are rich in the number of children and poor in wealth; where a separate school system is maintained for Negroes; where schools for Negro youth are conducted in churches, lodges, old stores, tenant houses, or whatever building is available; where, oftentimes in entire counties, high schools for Negroes do not exist and where publicly-supported professional training for Negroes is non-existent. The Director of Selective Service has pointed out that of 347,038 registrants of the first two registrations prior to Pearl Harbor who could not read their names, 220,052 were Negroes . . . Equalizing educational opportunity for all American youth is important to our National well being. Federal aid to education in areas of need is a necessity."[21]

They concluded their statement to President Truman by [illegible] that in the interest of the general welfare and for the improvement of black land-grant colleges he consider the following:

(1) The expansion in personnel and support of the cooperative agricultural and home economics extension work for needed programs in adult education.

(2) Provisions for organized research in the institutions themselves and appropriate access to experimental station facilities within the respective states to the end that current information essential to sound agricultural and rural life might be readily available to the constituency which the Land Grant and associate colleges serve.

(3) The activation of additional ROTC units in the interest of military preparedness and peace.

(4) Making more easily available equipment, surplus property, buildings and land to meet the demands being made on these institutions for the training of World War veterans.[22]

Throughout the war and its aftermath, the Conference was concerned that the black land-grant colleges make their contributions to national security and that the institutions share equitably in veteran's benefits and in the full postwar employment plan which the federal government had announced. The Executive Committee seized the opportunity to reactivate its call for the establishment of an ROTC unit on the campuses of all member schools. It reminded the Committee on Civilian Components of the Armed Forces on April 2, 1948 that twelve of the black land-grant colleges did not have ROTC units, even though the Morrill Act of 1862 specifically mandated that "military tactics" must be taught. The only land-grant institutions with ROTC units were (1) Prairie View State College; (2) South Carolina State A&M College; (3) North Carolina A&T College; (4) Virginia State College; and (5) West Virginia State College. In the appeal it was suggested that racism was a factor in the absence of military units in these black institutions. The presidents wrote: "Racism is probably the weakest link in our democracy and it is time in our own interest as a nation to do something about it. Fortunately, something can be done–even today by the Honorable Members of the Committee on Civil Components of the Armed Forces."[23]

The persistent efforts of the Conference soon bore fruit, for after 1945, ROTC units were opened at most of the black land-grant institutions. A few did not receive freestanding ROTC units, but became branches of 1862 land-grant universities.

Black college presidents felt the pangs of discrimination in the allocation of funds and in the right to participate in outreach projects involving blacks. The Conference gave them a forum, where, collectively, they could make their feelings known to the all-white Land-Grant College Association and to the federal government. In a letter to Dr. Lewis Webster Jones, President of the University of Arkansas and also head of the Executive Committee of the Land-Grant College Association, R. B. Atwood, Secretary of the Conference, wrote with reference to the Tennessee Valley Authority:

> As you know, the TVA will not enter into research or other projects with Negro Land-Grant Colleges because it has already contracted with the white land-grant colleges in each Valley State. Our requests to the TVA have met with little success. Several institutions have requested that their college farms be made TVA Test Demonstration Farms; we also have a Cooperative Social Studies Project (Sociological) for which we need financial support, and which, some of us feel, falls within the area of research aidable from TVA funds. It is suggested that your Committee can aid the Negro Land-Grant Colleges and establish and maintain a closer, more active working relationship with the TVA, at least in the seven states located in the TVA region.[24]

After approximately fifteen months of negotiations, the Tennessee Valley Authority entered into a research agreement on February 1, 1951, with the Land-Grant Colleges of the Tennessee Valley Region and the Conference of Presidents of Negro Land-Grant Colleges. It was specifically stated that the agreement with the Conference "covers the conduct of certain research studies of the effects of social and economic change upon the rural Negro population in the Tennessee Valley region . . . The title of the project shall be "Study of Social and Economic Change as it Affects the Negro Population of the Tennessee Valley Region."[25] The study was to be carried out by the Land-Grant Colleges in the seven states of the region: Agricultural and Technical College of North Carolina, Alabama A&M College, Alcorn A&M College, Fort Valley State College, Kentucky State College, Virginia State College and Tennessee A&I State College.

The presidents of these colleges agreed that the study would proceed in three stages. Stage One would be concerned with analysis of census data from 1920 to 1950 for all counties in the seven valley states on population, farm mechanization, farm electrification, selected crops, farm tenure, occupations, and charting basic trends. Stage Two would be concerned with selecting from the census data counties that showed marked increase in Negro farm ownership, marked decrease in Negro farm ownership, and counties that remained more or less stable. Stage Three would be concerned with the preparation of recommendations for the training and service programs based on the findings of the study.

The agreement further stipulated that the TVA would provide the expenses of maintaining the office of director, including salary, travel, material, and supplies up to $17,000 and that the participating colleges would contribute research personnel services, office space, supplies and facilities valued at not less than $20,000. The agreement was to be effective from February 20, 1951 to February 20, 1953.[26]

Eight months after the Land-Grant Colleges-TVA Cooperative Study was begun, Ernest E. Neal, Project Director, made a progress report to the Conference on Stage One of the research. Although he expressed concern about the uneven quality of the work to that point, he saw tremendous potential in the representatives from the seven cooperating colleges. The liaison representatives were: Dr. Elsie H. Wallace of Alabama A&M College, Helen J.E. DuBose of Alcorn A&M College, Dr. W.S.M. Banks of Fort Valley State College, Albert Pryor of Kentucky State College, John Winters of North Carolina A&T College, Dr. Harry W. Roberts of Virginia State College, and Dr. Jerome H. Holland of Tennessee A&I State College.

An analysis of data received from the liaison representatives and from the office of the director showed that there were definite common trends in the rural black population of the seven valley states. It was pointed out that the black population was decreasing in each of the states, with Kentucky having the greatest decrease and Mississippi having the smallest between 1910 and 1940. The data further showed the movement of blacks away from the rural areas. In Mississippi, for example, the rural proportion of the black population decreased from 90.6 percent in 1910 to 85.8 in 1940, while in Kentucky the black rural population decreased from 59.2 percent in 1910 to 37.4 in 1950. There was also a decrease in farm operators, both tenants and owners, in each of the seven states during the thirty-year span 1910–1940. Perhaps the most disturbing statistic showed that 50.4 percent of the farmers and 14.9 percent of the land in the seven valley states were in farms under 50 acres in 1940.[27]

The above statistical information, the report indicated, had definitive implications for black farmers. Agricultural colleges must not only train agricultural graduates to become county agents and vocational agricultural teachers, but must teach them that the practice of actual farming can be a challenging and profitable pursuit. Since black farmers do not have enough capital to operate large farms, college departments must make them understand their opportunities for assistance through Farm Home Agencies, Production and Subsistence Loans, Farm Ownership Loans, Insured Farm Ownership Mortgage Loans and Farm Housing Loans. Efficiently operated private farms could help bring economic stability to the seven Valley states. In the practice of farming, mechanization and its effects upon farm operators and workers should be explored by agricultural divisions in colleges with the assistance of outside specialists.

The presidents of the Conference complained that the seventeen black land-grant colleges did not develop so rapidly as those for whites in the same seventeen states. Although the Second Morrill Act provided for increased funds, this was not true with other funds, notably funds for Experimental Stations made available under the Hatch Act of 1887 and funds for Cooperative Extension Service made available under the Smith-Lever Act of 1914. They were disturbed over the fact that in each of the Southern states programs of agricultural experimentation and extension were carried out under the control and direction of the white land-grant colleges and universities to the exclusion of the land-grant institutions for blacks.

Some of the inequities may be seen in the following statistics. For the year ending June 30, 1950, the white land-grant institutions in the seventeen southern states received $43,536,688 in federal funds, while in the same states the black land-grant institutions received $2,307,915. The black institutions received only five percent of the federal funds which came into the region, but if equity on the basis of population had been served, the black land-grant institutions would have received 22 percent or a total of at least $11 million instead of $2 million they actually received.[28] Since these figures indicated such blatant discrimination against black institutions, the Presidents resolved to seek their fair share and seek ways to control it in future years.

While the diversity of interests and major concerns pursued by the presidents of the Conference during its 33 years would be too numerous to discuss, certain themes were emphasized throughout its existence. These included: curriculum change and expansion, funds for operation, jobs for students, full participation in the military, industrial, and economic development of the country, and, finally, survival in the wake of integration/desegregation brought on by the changes of the late forties and early fifties and the Supreme Court decision making segregation unconstitutional on May 17, 1954.

In the early 1950's, as racial barriers in education across the United States began to show signs of crumbling, the Conference of Presidents of Negro Land-Grant Colleges began examining itself in anticipation of a more integrated society. President Atwood, long-time secretary of the Conference, wrote member presidents to see if they opposed or favored the dropping of the word "Negro" and changing the name to the "Conference of Presidents of Land-Grant and Associated Institutions."[29] Having been assured that their votes would remain in strict confidence, most presidents voted to drop the word "Negro" and give official recognition to the many associate members. Despite the secret vote, the name remained the same until the Conference dissolved to become a part of the Association of Land-Grant Colleges and Universities.

As larger land-grant universities began to desegregate their student bodies in greater numbers in the late 1940's and early 1950's, presidents of black land-grant colleges began to express increasing concerns for the future of black students. Speaking on the topic "What are Negro Land-Grant Colleges Doing to Fabricate a Program to Meet Present-Day Needs" at the Thirtieth Annual Session in Washington, D.C. on October 22, 1952, Dr. Felton G. Clark of Southern University reminded the group that "The Negro Land-Grant Colleges have held open the door, leading to college training for countless Negroes who otherwise could never have embraced it. Literally, they have been instruments for the democratization of higher education."[30] But he emphasized that the litigation and rulings of the federal courts "require a reassessment of the role of land-grant colleges for Negroes . . . It is highly important to realize that Negro Land-Grant Colleges came into existence for just one reason—segregation. When the elimination of segregation from the South's Land-Grant Colleges and Universities has become an accomplished fact, the question is certain to be raised as to the justification of a land-grant college for Negroes . . . "[31]

Black presidents were too optimistic about the positive values that desegregated institutions would likely bring to black students in higher education. Many of them failed to see that despite the fact that a few barriers were failing in the South, black people would, in the main, remain isolated in many ways from the general culture; that employment patterns, business opportunities, teacher education and the prevailing racial patterns would not change so drastically that black land-grant colleges would lose their identity or usefulness. They therefore ascribed more meaning for blacks to the so-called "distinct social and cultural transition" that America was passing through than was warranted. Nevertheless, they openly expressed that "the Negro, increasingly, is becoming an integral part of the American social order as evidenced by:

(a) his acceptance in educational institutions formerly closed to him;
(b) his acceptance in professional and learned societies;
(c) his securing and using the franchise;
(d) his increased legal, judicial and administrative participation in affairs at the local, state, national, and international levels;
(e) the subsidization of his brainpower in government and industry and in basic and applied research;
(f) his being called upon to offer instruction in the great colleges and universities throughout the world;
(g) the appropriation of his talents in merchandising, by many of the major commercial enterprises of the country;
(h) his constituting a potent force in organized labor at the policy-making and leadership levels, and
(i) recognition of the fact that blocking the flow of Negro labor may eventually wreck the American economy thereby causing a collapse in the economy of the free nations opening the door to world wide communism".[32]

President Clark argued effectively that there were all-inclusive fundamental changes in the South, namely "an emerging climate of conviction that every individual is of potential worth and that society should extend to all individuals the opportunity to develop their highest worth . . . there is a developing ideology which expresses itself in acceptance, assimilation, and integration of all persons regardless of the diversity of their cultures." The question was ultimately asked, "Is the Negro Land-Grant College retarding this social process or is it facilitating it?"[33] An examination of curricula, the addition of new academic programs, the assignment of resources for research, and more effective training of teachers and leaders among black people were seen as ways by which black land-grant colleges could facilitate the new trend toward a more integrated America.

Action toward making the Conference a part of the ALGCU intensified during 1953 and 1954. President Carl W. Borgmann of the University of Vermont wrote each of the black presidents seeking his attitude toward a merger with the Association of Land-Grant Colleges and Universities. While most presidents had some reservations, most eventually accepted the union as an inevitable course of action. Dr. Felton G. Clark concluded, for example, that "since a score of other professional associations, even in the deep South have taken this step, which is now under consideration, apparently this should not present an improbability for the association of Land-Grant Colleges and Universities." He continued: "If there are problems peculiar to racial factors, it appears as though the Association of Land-Grant Colleges and Universities need only to refer to what these other bodies have done to seek a solution to those issues incident to, but nevertheless affecting this matter of a single association for all those institutions which are, by law, categorized as Land-Grant Colleges."[34]

A special committee composed of Presidents R. P. Daniels, Virginia (Chairman); B. C. Turner, South Carolina (Conference President); R. B. Atwood, Kentucky (Conference Secretary); and F. D. Bluford, North Carolina, was formed to study all problems relating to the present and future status of the Conference of Presidents of Negro Land-Grant Colleges. The Committee agreed to take the following recommendations to the Conference: "Be it resolved that the Conference of Presidents of Negro Land-Grant Colleges hereby officially terminates its existence as a distinct organization as of December 31, 1955 . . . (and) that the members . . . do hereby organize themselves into a successor organization to be known as the Council on Cooperative College Projects (CCCP)."[35] Provisions were also recommended for the termination of the Social Studies Project and for the continuation of the TVA Cooperative Project through the successor organization and Howard University, and the Audio-Visual Project through the successor organization and Virginia State College.

The first officers of the Council on Cooperative College Projects were B. C. Turner, Chairman, and Dr. R. B. Atwood, Secretary-Treasurer. They were to serve from January 1, 1956 until the annual meeting, at which time the Council would hold elections. A total of $500 was allocated for the operating budget. With this action, the Conference of Presidents of Negro Land-Grant Colleges and its associate black colleges were assigned to the pages of history and another potent voice for black education had been lost.

During its existence the Conference of Presidents of Negro Land-Grant Colleges did not focus exclusively on the land-grant functions of their institutions, but upon the broad spectrum of educational interests affecting black people in the South. As indicated previously, the presidents of the seventeen black land grant colleges enriched the Conference by inviting other presidents of private and public colleges to associate membership. They attended all meetings, participated in discussions, served on committees, and helped in various other capacities. They were admitted to membership because they shared common concerns in the improvement of educational opportunities for blacks and for the strength in unity that the Conference offered. The institutions whose presidents were given associate membership in the Conference were: Atlanta University, Central State College in Ohio, Hampton Institute, Howard University, Savannah State College, Texas Southern University, and Tuskegee Institute. The Manual Training School from Bordentown, New Jersey had the unique experience of being the only secondary school with associate membership.

From the associate membership came notable leadership, especially in the social sciences. For example, Professor E. Franklin Frazier, an internationally known sociologist from Howard University, served as Coordinator of "The Land-Grant Program in Cooperative Social Studies." He led a group of scholars from member institutions in researching demographic materials on blacks, land tenure, availability of health facilities, changing economic problems, health facilities, occupational opportunities, family relations and others. Among the scholars contributing to the studies in the social sciences were: W.E.B. DuBois of Atlanta University, Ambrose Coliver, an assistant to the commissioner of the U.S. Department of Education, and Charles S. Johnson of Fisk University, to name a few. Black land-grant colleges as well as other black institutions were able to strengthen their curricula, focus their resources on particular problems, and develop a greater *esprit de corps* in approaching problems common to all of them.

In unity, there was strength; they could criticize and condemn the system without fear of being singled out as mavericks. They saw the value in teaching, but they insisted that research, especially in agriculture and rural development, be equitably supported in their institutions.

They sought to expand their curricula, they tried to prepare their students for a rapidly changing wartime economy, and they tried to adapt their total academic programs to meeting needs created by mechanization of farms and gradual industrialization in the South. Perhaps they demonstrated too much faith in democracy when they abandoned the purposes of the Conference and cast their lot with the Association of Land-Grant Colleges and Universities. The strength in unity and the direct sharing of common experiences could not be accomplished in the ALGCU with the same meaning and intensity. Also, the identification with associate member black colleges with similar experiences became a thing of the past and a treasure lost forever.

In a more limited way the Council of Presidents/Chancellors of 1890 institutions and Tuskegee University have continued to meet as a special caucus group at annual meetings of the now National Association of State Universities and Land-Grant Colleges in an effort to promote the interests of their institutions. Dr. Richard D. Morrison, former president of Alabama A&M University, presided over this Council for many years and led the presidents in their fight to have their colleges and universities recognized by the USDA and other federal agencies as institutions that could effectively implement the land-grant functions of teaching, research and extension service.

CHAPTER FIVE

Teaching, Academic Programs, And Research From 1920 to 1967

THE land-grant idea in America's colleges and universities is realized through the areas of teaching, research, and extension services. While 1862 institutions had the combination of state and federal resources to enable them to begin development in each of those areas during the early years, 1890 institutions, because of racial segregation and discrimination, were limited essentially to the teaching phase for approximately 77 years. Even with the limitations and restrictions under which they functioned, they began to make significant inroads into the areas of research and extensions services on a limited basis; however, with the lack of federal and state funds and of social and political support for their mission, they experienced anxieties and uncertainties which adversely affected development during the early years.

The sources of anxieties and uncertainties in the beginning for black land-grant colleges can be attributed in part to (a) the aftermath of slavery and the legacy of an exploitive plantation system; (b) black students who were more fascinated with liberal arts and sciences than with agricultural and mechanical arts; (c) private and denominational colleges which had already established their reputation through strong cultural curricula offerings; (d) the lack of high schools for blacks and the small number of black graduates from existing private and public schools; (e) the existence of political and conservative forces who opposed education for blacks and considered them uneducable; (f) the necessity of offering elementary and secondary course work before attempting collegiate work; and (g) the limitation of educational and employment opportunities in these seventeen states by state statute.[1] Teacher training among blacks was seen as an inescapable need, and even when agricultural, mechanical arts, and home economics courses were offered, they were integrated into the teacher education sequence.

The cursory overview of early educational practices given in previous chapters clearly reveals that academic programs were geared to elemen-tary, secondary, and normal training with the major emphasis on teacher education. By the 1920's most of the 1890 institutions were offering collegiate programs in agriculture leading to a standard bachelor of science in agriculture or in home economics. It should be pointed out that institutions like Alcorn State University, Alabama A&M University, Virginia State University, North Carolina A&T State University, and others can produce records showing that B.S. degree programs were offered prior to the beginning of the twentieth century. So the year in which they began awarding a degree is debatable. An examination of curricula in most of the early catalogs will show that they did not possess the personnel, courses, or resources to give a standard degree, based on 120 semester hours of college work. In some cases, these institutions had state approval to issue the baccalaureate degree, even though their curricula did not justify conferring a standard degree.

While black land-grant institutions were still operating at the secondary and normal school levels, federal legislation enhancing vocational education was passed which encouraged greater emphasis on teaching. The first federal legislation to provide specifically for funds to aid the states in the preparation of vocational teachers was the Nelson Amendment to the Morrill Act of 1890 which was enacted on March 4, 1907. According to the Nelson Amendment, agricultural colleges "may use a portion of this money for providing courses for the specific preparation of instructors for teaching the elements of agriculture and mechanical arts."[2] Liberal interpretation of this act permitted land-grant colleges to offer instruction not only in agriculture, mechanic arts and home economics, but also in teacher education.

The Nelson Amendment was made more useful by the ruling that the funds could be used in providing supervision and special aid to in-service teachers and to the instruction of teachers in agriculture, mechanic arts, and home economics in summer school. In Chapman's review of this Amendment, he wrote:

> This definite provision for teacher training and the equally important stipulation, from the standpoint of the Negro, that the funds be equitably divided between the races in those states which by law require Negroes to attend separate schools, marked the new and more substantial program of teacher-training for Negroes. The Negro land-grant colleges made full use of these funds to the extent to which they were available.[3]

While in most Southern states federal funds were looked upon as a substitute for rather than a supplement to state funds, the Nelson Amendment's call for equitability positively affected appropriations to black institutions. Also, the need for well-qualified black teachers increased, making summer school attendance increase at a rapid pace. Teachers in Florida, for example, began to work not only for state certification, but also toward eventual graduation from college with a B.S. degree. So in 1913, the legislature passed the so-called "Summer School Act: which provided for the maintenance and regulation of summer schools for teachers and other students in the state. The Agricultural Department also achieved notable success with the passage of the "Summer School Act," for the Board of Control stipulated that "it also enables the teachers to center their efforts upon the pedagogical and vocational courses."[4] At Southern University, Vincent reports that "the revisions of Federal appropriations under the Nelson Amendment saw a corresponding rise in the University's program. During the 1910–1911 academic year, the schools of cooking, blacksmithing, wheelwriting, and horticulture were added."[5] Also at Prairie View A&M University, Thomas Jesse Jones observed that in training teachers for black schools and the agricultural courses Prairie View trained 75 percent of the black teachers in the public schools, and the state was securing more in teaching effort with the lack of expenditure than at any other institution in the state.[6] As support for teacher education became more abundant, 1890 institutions dramatically expanded their teacher certification programs, agriculture and home economics included.

The function of teaching was enhanced with the passage of the National Vocational Education Act, commonly known as the Smith-Hughes Act, on February 23, 1917. This act launched a nationwide program of vocational education and marked the beginning of a definitely organized program of training for teachers of vocational subjects. Prior to this act, even with the Nelson Amendment, there had been no such recognized program of teacher training; however, teacher training was the principal land-grant function of 1890 institutions. The purpose of this act was:

> To provide further promotion of vocational education; to provide for cooperation with states in the promotion of such education in agriculture and the trades and industries; to provide for cooperation with the states in preparation of teachers of vocational subjects; and to appropriate money and to regulate its expenditures.[7]

Beginning with an initial appropriation of $1.4 million, Smith-Hughes funds reached $7 million by 1926 and with subsequent legislation increased that amount significantly each year. This Act vitally affected 1890 institutions which from the beginning assumed the major responsibility for the preparation of agricultural and home economics teachers for black public schools in the rural communities of the South. While the Act itself did not specifically state the institutions to which the funds would be granted, the state boards of vocational education, which controlled the funds, designated 1890 institutions in all of the states. However, like the Smith-Lever Act of 1914, the Smith-Hughes Act made no provisions for an equitable division of these funds along racial lines.

In 1917, Congress further expanded opportunities with the enactment of the Smith-Hughes Vocational Act of 1917 which provided federal aid for vocational education in schools of less than college grade. The statute required that a Federal Board of Education be created to supervise the service, and it required matching of federal funds by state and local funds. The Act provided for promotion of vocational education through cooperation with states "in paying the salaries of teachers, supervisors, and directors of agricultural subjects and the preparation of teachers of agriculture, trade, industrial, and home economics subjects."[8]

At the outset the Federal Board for Vocational Education and the several state boards included the 1890 institutions and Tuskegee in programs of teacher training. The states of Alabama, Mississippi, and South Carolina introduced vocational teacher training the very first year and were followed by Arkansas, Florida, Georgia, North Carolina, Louisiana, Texas, Oklahoma and Virginia. It should be noted that the vocational teaching training programs were carried out in Alabama by Tuskegee Institute and in Virginia by both Hampton Institute and Virginia State College. Land-grant colleges in Maryland, Missouri, and Alabama were not involved in this phase of teacher training.[9]

With federal grant-in-aid matched by local and state contributions, 1890 institutions increasingly expanded their emphasis on teacher training. At Florida A&M University, William H. A. Howard was named Smith-Hughes Professor of Agriculture and Robert G. Bruce Smith-Hughes Professor of Mechanical Arts. In addition to the four-year course leading to the B. S. degree in agriculture, mechanical arts, or home economics, students were permitted to pursue a Smith-Hughes teacher training course leading to certification in any one of the above mentioned fields after a period of two years. Practice work was required in each area throughout the period. To further liberalize opportunity in agriculture at FAMU, a one-year course in practical agriculture was added in 1917. The work was arranged to cover a full year of twelve months and to follow the work of the farm as it varied according to the seasons. Dean Benjamin L. Perry, Sr., long-time dean of agriculture at FAMU, wrote that: "Instruction was given through lectures, laboratory exercises, library assignments, and actual performance of farm tasks along the latest and most approved scientific methods."[10]

At Virginia State University as an outgrowth of the Smith-Hughes Act, a department of vocational agriculture was established to prepare agricultural teachers for the public schools. A sequence of agricultural courses equivalent to a major was offered for men enrolled in the normal school program. Women students who planned to teach in rural areas also elected to enroll in agricultural courses.

As resources became available through federal funding, students increasingly took advantage of the training opportunities for vocational teachers. From 12 students which Klein reported in his study in 1915, the college enrollment in 1890 institutions grew to 3,671 in 1928; 4,218 in 1929; 6,115 in 1934; and 10,265 in 1937.[11] Even though enrollment increased at a rapid rate over the 22-year period noted above, enrollment of students in agriculture and home economics did not grow at the same rate. For example in 1934, the enrollment of students in agriculture totaled 277 and in home economics 242.[12] The enrollment trend away from courses in agriculture and home economics was attributed to practical reasons involving (a) the nature of the courses themselves; (b) the nature of the work to be followed; and (c) the chances for placement. The trend was toward arts and sciences and teacher education.

By 1950 each of the 1890 institutions had well-defined, four-year, standard programs leading to the bachelor's degree in agriculture and home economics. Also, these programs were generally accredited by the required regional agencies. Programs of study in these disciplines paralleled those programs in 1862 institutions with the exception of the required teacher education component. The emphasis on teaching was essential because racial segregation, with few exceptions, restricted black agricultural and home economics graduates to the field of teaching.

Since agricultural and home economics graduates were generally restricted to teaching, and since many school systems in Southern and borden states failed to make provisions for vocational training for their students, an oversupply of teachers was beginning to surface in the late 1930's. "In June 1937, 152 men were graduated from Negro land-grant colleges as teachers of vocational agriculture. Of this number, eighty-nine were placed that year in positions as teachers of vocational agriculture. Thirty-nine were employed in positions not related to their preparation. A total of 128 or 84.2 percent were placed and 24 or 15.8 percent were not placed."[13] In home economics, only one state, Maryland, reported an oversupply, and six states an undersupply. It should be emphasized that the oversupply was artificially created by prejudiced and racist leadership in the South which refused to provide opportunities for training for blacks in agriculture, home economics, and in trade and industries.

That this restriction of opportunity among blacks persisted over the years may be found in Eddy's study of land-grant institutions in the

1950's. He wrote: "The percentage of agricultural graduates entering teaching runs over 90 percent in some of the Negro Land-Grant Colleges. The same situation exists in engineering and home economics, largely because of the lack of other teaching opportunity in these fields."[14]

Following the Civil Rights Act of 1964 and subsequent civil rights legislation, demands that racial segregation and discrimination be abolished in land-grant institutions came from many groups. The case of *Adams v. Richardson* (1971) which became commonly known as the *Adams States Cases* required ten Southern states to work toward a unitary system of higher education which would "enhance" and not place a "greater burden" on 1890 institutions. It was essential that agriculture on historically black land-grant campuses become more complex and diversified. With the abolition of black schools in the early 1960's, student interest in agricultural education declined since fewer teaching jobs were available. Also, beginning in the late 1960's, stricter certification requirements for teachers discouraged many students from entering this field. With only the traditional options in the field of agriculture, the enrollment decreased steadily in the early 1960's. For example, in 1963, the total enrollment in the sixteen historically black land-grant institutions was only 1,150 students. However, as the options in agriculture increased, the enrollment also increased to 1,377 in 1969 and to 1,864 in 1977.[15]

In 1989, there were a total of eighty-four degrees in agriculture programs offered by 1890 institutions. It should be emphasized that during the integration/desegregation struggle, Kentucky State University and South Carolina State College lost all of their land-grant functions except home economics and West Virginia State College had all of its land-grant functions transferred to West Virginia University. Other institutions like North Carolina A&T State University, Florida A&M University, and Virginia State University saw their enrollments decrease through reorganization and the transfer of programs to 1862 institutions.

A brief review of the curricula in agriculture at 1890 institutions shows an increasing variety of programs such as agribusiness, agricultural economics, agricultural engineering, urban agriculture, aquaculture, ornamental horticulture, agricultural science, pre-veterinary medicine, park management, wildlife management, and many others. These major areas join the more traditional offerings such as agronomy, plant and soil science, animal science, horticulture, and poultry science. In addition to the four-year programs, several of the institutions established two-year terminal program offerings during the 1950's for students who preferred work in agricultural industries rather than in teaching or in other areas requiring a bachelor's degree. Students at Virginia State, for example, could enroll in a two-year program in the following areas: dairy farming, dairy manufacturing, livestock farming, farm mechanics, floriculture, fruit and vegetable production, livestock farming, and poultry farming. These programs were discontinued in the mid-sixties due to low enrollment.[16] At the doctorate level, Alabama A&M University now offers two programs leading to the Ph.D. degree—Plant and Soil Science and Food Science. Tuskegee offers an instructional program leading to the Doctor of Veterinary Medicine.

The fact that agriculture at 1890 institutions has become more extensive and diversified does not mean that it is attractive to black students. Dr. R. Grant Seals' study of the "Educational Status of Blacks in U. S. Agriculture" found that: "There were 1,851 undergraduates enrolled in agriculture in predominantly black institutions in the fall, 1975 . . . It is reasonable to assume that practically 90 percent are Afro-American students."[17] His study further pointed out that these institutions graduated 294 students with B. S. degrees in agricultural education, plant and soil sciences, animal sciences, agricultural economics, and horticulture, and a few in food technology or biochemistry. Of 294 graduates, he estimated that approximately 10% or 30 would attend graduate school at the 1862 institutions.[18] This lack of students studying for master's degrees and doctorates means that 1890 institutions cannot staff their faculties with African-American role models for their students nor will there be appropriate representation in state, federal and private sector employment. Dr. Charles Magee, the Director of Agriculture at Fort Valley State College, who also holds the Ph.D. degree in agricultural engineering, laments the fact that in 1969 there was only one black Ph.D. in the agricultural engineering program, and 20 years later there were only four blacks with Ph.D.'s in this field.[19] This scarcity of blacks at the doctorate level extends to almost every doctoral program in agriculture.

It was estimated that in 1977 black undergraduate enrollment in all agricultural disciplines in the United States stood at 2,500 which represented approximately three percent of the 98,519 undergraduates in agriculture in the United States. Again, Seals found that much of the lack of growth in agriculture in 1890 institutions could be attributed to:

> The historical underfunding of resident instruction by the respective states probably has had the greatest impact on enrollment. The almost continuous litigation in the last decade involving public colleges in certain southeastern states relative to the achievement of racially-non-identifiable educational systems has affected the predominantly black colleges out of proportion to their being the cause of the situation.[20]

In almost every case, black institutions bore the greatest brunt of the burden.

In the late 1930's and especially during the aftermath of World War I, black educators began to feel an increasing need for more professional and graduate training. Anticipating the problem and recognizing that all Southern and border states had segregated state-supported universities, Missouri in 1921 and 1929 and West Virginia in 1927 passed legislation for out-of-state aid for blacks wishing to pursue graduate and professional studies. Maryland granted the out-of-state aid for tuition, travel and excess fees in 1933, and Virginia and Kentucky fell in line in 1936. By 1938, out-of-state scholarship laws had been enacted by eight Southern and border states.[21] It was not until 1945 that the State of Florida, in response to a request by President William H. Gray of FAMU, approved an out-of-state scholarship program "to provide educational opportunities to black students which are not given at Florida A&M College, but which are provided at state institutions for whites."[22]

There can be no denying that the practice of out-of-state aid sent young blacks to better schools than the South could possibly afford for its own white youth. But this advantage could not obscure the need for equality and dignity in the pursuit of higher education. Thus, the "out-of-state" solution for graduate/professional training was shattered by the U. S. Supreme Court in December of 1938 in the *Lloyd Gaines v. University of Missouri* case. The Court said:

> Here the petitioner's right is a personal one. It was as an individual that he was entitled to the equal protection of the laws, and the state was bound to furnish him within its borders facilities for legal education substantially equal to those which the State there afforded to persons of the white race, whether or not other Negroes sought the same privileges.[23]

The fact that the Court struck down the out-of-state aid laws in Missouri did not cause the other Southern and border states to refrain from the practice, but in some cases, it intensified their resolve to follow the "separate-but-equal" pattern. At the Fifteenth Annual Conference of the Presidents of Negro Land-Grant Colleges, meeting at Howard University in 1937, the presidents decided that if "separate-but-equal" is the biracial pattern in these states, then their institutions should have strong undergraduate programs before introducing graduate programs. So behind a facade of learned discussions of vocational guidance, cooperative extension work, conservation, farm tenancy, higher life values, and economics, the fearless John W. Davis of West Virginia State, William H. Bell of Alcorn, and Felton G. Clark of Southern who formed the Committee on Findings wrote:

> Provision has already been made for advanced work in a number of our institutions. An increasing number of students will apply for courses on the graduate level. It would seem a wise precaution to assure the adequacy and effectiveness of the undergraduate program before advancing into the graduate field.[24]

In the meantime, the white leadership in Texas was virtually requiring President Banks of Prairie View to make provisions for graduate studies. While pleading for a larger budget and higher salaries for his teachers, the Division of Graduate Studies was established in 1937, becoming the first such graduate program among the 1890 land-grant institutions. This new division offered the Master of Science degree in agricultural economics, rural education, agricultural education, school administration and supervision, and rural sociology.

With the threat of having to desegregate 1862 institutions because of blacks seeking admission to special graduate or professional programs, (presaged by the *Gaines v. University of Missouri* case), governing bodies began a scramble to establish graduate schools at many of the 1890 institutions. Programs such as graduate education, pharmacy, law, engineering, architecture, and graduate specialties in agriculture and home economics were quickly placed on black campuses. In the ten-year period between 1937 and 1947, seven 1890 institutions began graduate programs. Two additional institutions added graduate programs in 1956 and 1957.[25] But even with this wider range of graduate programs "in 1953, the education majors numbered more than four times the combined enrollment of the other three fields in which graduate students were reported."[26] Since 1954, the walls of segregation have come tumbling down in 1862 institutions, yet blacks are not found in graduate programs in any appreciable number. Consequently, there is always a shortage of qualified black scholars to carry out the teaching, service, and research functions needed by 1890 institutions.

In order to encourage students to enter agriculture, 1890 institutions must help to remove the negative image of the discipline. As Magee said: "If you are majoring in any phase of agriculture, and it doesn't matter whether it is animal science, horticulture, or agriculture economics, it is always assumed that you plan to be a farmer."[27] Through a concerted effort involving professors, administrators, and governmental agencies, students can be guided to pursue the wide variety of opportunities in agriculture.

One of the major reasons students should pursue careers in the agricultural sciences is to help blacks who still work the land for a living. In 1920, one in every seven U. S. farmers was black. There were 926,000 black farmers in the United States. By 1982, only one farmer in 67 was black. There were only 33,000 black farmers in 1982, and they comprised less than two percent of the 2.2 million farmers. The rates of farm loss have been much heavier among blacks than among other racial groups. In fact, black farmers are becoming an endangered species.[28] With the disappearance of the black farmers, black people are not carrying their appropriate share of the burden in raising foodstuff, and no race can be free when its foodstuff is in someone else's pantry. Secondly, it is essential for blacks to become more visible as teachers, scientists, administrators, and decision makers in departments of agriculture at the state and federal levels. Thirdly, it is extremely important for blacks to give technical assistance to the African countries because black political influence in this country may be tied to Africa and other Third World countries. Their basic needs are in the areas of agriculture and engineering as measured, in part, by the large number of African and Third World students majoring in agriculture in 1890 institutions. Fourthly, through effective teaching, students, and especially black students who are deserting the field of agriculture, could be counseled to pursue higher degrees in agriculture in order to take leadership roles at 1890 institutions and in other areas of extension services or agricultural research.

Agricultural research at 1890 institutions was meager and uncoordinated during the first eighty years of their existence. In isolated instances, one could find individual professors who used their extra time and energies to pursue a project, but most institutions did not earmark funds for research or identify a cadre of professors to engage in research activities.

Tuskegee University, a notable exception, was the black institution that blazed the trail in agricultural research through the leadership of Dr. George Washington Carver. Exercising the inquisitive mind of the scientist, Carver engaged in various types of research activities at Tuskegee while teaching a full load; however, by 1904, Washington had relieved him of his departmental and classroom duties in order for him to carry on his research and direct the experiment station which was established in 1897. As new buildings and new agricultural laboratory facilities were added to the campus, Carver did significant research in his war against the boll weevil which was destroying cotton, the major cash crop of small farmers. By 1910, he issued a warning that farmers must learn to diversify their crops and place more emphasis upon raising cowpeas, soybeans, sweet potatoes, and peanuts as cash crops.

While Carver was a multi-talented scientist whose research involved cotton, trees, dehydration of fruit and vegetables, corn, grasses, weeds, and many others, his greatest successes were with peanuts, sweet potatoes, and the pecan. He revolutionized agriculture in the South when he developed products from such crops as pecans and increasingly convinced southern farmers to grow these crops in place of cotton to provide a new source of income. Carver made more than 300 products from the peanut which ranged from instant coffee to soap and ink. From the sweet potato, he made 118 products including flour, shoe polish, and candy. He produced 75 products from the pecan. Among his other scientific achievements, he made synthetic marble from wood shavings, dyes from clay, and starch, gum, and wallboard from cotton stalks.

The impact of Dr. Carver's research may be measured in part by observing the changes in Coffee County, Alabama which was on the brink of bankruptcy as a consequence of the destruction of sixty percent of the cotton crop by the boll weevil in 1915. Using much of the results of research by Carver and Tuskegee University, the county began diversifying its farms and by 1917, peanuts became the major crop with more than a million bushels being harvested. Seventeen years later, in 1934, Coffee County held the world's record for peanut production.

Even with the close proximity of Tuskegee to Coffee County and the worldwide knowledge of Carver's influence in making peanuts a leading commercial crop, racial prejudice prevented him from being duly recognized. On December 11, 1919, a monument was unveiled in the chief town of Enterprise honoring the boll weevil as the change agent for the agricultural revolution rather than Dr. Carver. According to the tourist brochure, "the Boll Weevil Monument, a symbol to man's willingness and ability to adjust to adversity . . . in profound appreciation of the boll weevil and what has been done as the herald of prosperity, this monument was erected by the citizens of Enterprise, Coffee County, Alabama."[29] Standing ten feet tall at the intersection of Main and College Streets, the monument gives no recognition to Dr. Carver's agricultural research which literally helped to save the town and county.

In 1940, the very first research foundation at a black institution was established by a gift of $60,000 from Dr. Carver for the training of young research scientists. The Carver Foundation now concentrates its activities in four areas: biomedical-natural science research; energy and environmental research and development; agricultural research; and rural development-behavioral science research.[30] During the last 23 years practically all of the 1890 institutions have established research centers and foundations to encourage selected phases of scientific, technical and agricultural development.

During the presidency of C. V. Troop (1945—1966) and the leadership of Administrative Dean W.W.E. Blanchet, Fort Valley State College (FVSC) began its first efforts at supported research. In 1947, the Carnegie Foundation, through its Grant-in-Aid Program, allocated funds to the Atlanta University Center for research for the advancement of teaching. FVSC became an affiliate of that Center with grants of $1,000 annually for research from 1947 to 1952. Of the sixteen projects completed by FVSC, five were in the field of agriculture.

Joseph C. Crofton pursued research which dealt with nitrogen fertilizer and carbonaceous residue in soils; Dr. Sidney H. Evans studied the status of black farmers in Peach County; James Renick, Agricultural Economist-Dairyman and Russell Williams, Poultryman, were involved in research on the use of garbage in swine production; and Houston Stallworth, horticulturalist, conducted irrigation and fertilization studies for potatoes. This latter research led to the first sprinkler irrigation system at the college which was still operative in 1976.

In addition to small Faculty Research Grants from the Carnegie Program, a cooperative relationship in research between the University of Georgia Experiment Station and FVSC Division of Agriculture was established and from 1954 to 1974 brought $10,000 to FVSC for research. These funds provided one-half the salary of a faculty member engaged in research and the remainder for the support of research projects in horticulture and agronomy.[31]

Considerable emphasis was placed on research at FVSC: however, it should be made clear that many other institutions carried on similar types of research activities. in fact, at almost all of the 1890 institutions, small-scale research was being carried on by enterprising professors, but rarely did they have funds to support their efforts. At Southern University, Dr. Booker T. Whatley received a $5,000 University grant in 1962 to conduct research on the flowering and sprouting potential of sweet potatoes. This was the earliest record of organized, sponsored research in what was then the College of Agriculture. This initial funding for research, though small, led to the recognition of Dr. Whatley as an internationally renowned scientist in the field of sweet potato research and the first black "Fellow" in the American Society of Horticulture.

Of the numerous grants made during the early 1960's, the largest was the $265,000 grant received from the U. S. Department of Commerce and the U. S. Department of Agriculture by Dr. T. T. Williams of the Agricultural Economics Department at Southern University, to study economic underemployment throughout the state of Louisiana. This was the first of numerous grants received by Dr. Williams to look at social and economic implications of agriculture and commerce and their effects of underemployment and unemployment of socially disadvantaged clients in Louisiana.[32]

In 1947, Prairie View A&M University established an experimental station known as the Prairie View Substation, with the first state support being provided in 1962. Between 1963 and 1967, the total funds from state sources amounted to $129,676. At Virginia State University, Professor I. C. Peoples had begun promising research in poultry science, concentrating on the effects of lauryl sulphate on eggshell quality in laying hens. Alabama A&M University indicated that the first organized research was conducted there in mid-1950's in the area of plant science. At Florida A&M University, a FAMU Research Bulletin (formerly Quarterly Journal) has been published since 1932, and many of the articles by the faculty focused on agriculture and home economics. At Tennessee State University, it was reported that agriculture, the biological sciences and engineering led the way in research, but prior to 1960 much of the research did not have strong financial support.

That research was not a planned, financially-supported aspect of the academic programs in 1890 institutions prior to 1960 may be seem in an examination of their mission statements. Almost all of the mission statements omitted direct reference to research prior to the advent of federal funding in 1967. The statement of purpose of North Carolina A&T University which was taken from the 1957 University Catalog reads:

> The primary purpose of the College shall be to teach the Agricultural and Technical Arts and Sciences and such branches of learning as related thereto; the training of teachers, supervisors, and administrators for the public schools of the State, including the preparation of such teachers supervisors and administrators for the Master's degree. Such other programs of a professional or occupational nature may be offered as shall be approved by the North Carolina

> Board of Higher Education consistent with the appropriation made therefor.[33]

Even though 1890 institutions were poorly funded and were denied an appropriate share of research and extension funds prior to 1867; even though their students were frequently undereducated and poorly trained because of weak, inadequate secondary schools; and even though their academic programs were restricted by laws requiring racial segregation, they still tried to carry out the land-grant philosophy of "giving every youth a chance." In doing so, they sent forth many teachers, farmers, home economists, professional men and women, and others into the world to become leaders of their people. Although charges of maintaining low standards were frequently levied against 1890 institutions, they epitomized the philosophy summarized by Dr. William Oxley Thompson, former president of Ohio State University and Chairman of the Land-Grant Association, who once said: "The tendency . . . to operate an institution for the sake of maintaining standards is all wrong as I see it . . . An institution is to be operated for the good it can do; for the people it can serve; for the science it can promote; and the civilization it can advance."[34]

For one hundred years, 1890 institutions have tried to maintain the highest possible standards but have never lost sight of the goal of giving underprivileged youths a chance. As President Frederick S. Humphries of Florida A&M University proudly proclaims, the University aims to offer "Excellence with Caring." As a result of the combined efforts of these historically black institutions, thousands of teachers, extension agents, research scientists, and other leaders are, indeed, serving the world.

CHAPTER SIX

Research In 1890 Institutions Since 1967

ORGANIZED federally-supported research at 1890 institutions did not begin until 1967 with the development of the Cooperative State Research Service (CSRS) support program for research. This new movement toward a greater semblance of equality between 1862 and 1890 institutions was undoubtedly influenced by the successful gains made in the national civil rights movement. The passage of the Civil Rights Acts of 1964 and the Voting Rights Act of 1965 along with subsequent civil rights legislation stressing equal opportunity for minorities were clear signals to the United States Department of Agriculture (USDA) that increased support must be given to historically black land-grant colleges. At the same time, black college presidents, members of their faculties and their supporters were beginning to bring increasing pressure upon the USDA for a slice of the research pie.

Movement toward research appropriations in 1890 institutions effectively began in 1965 when, at USDA's request, both houses of Congress passed Public Law 89-106. This law authorized discretionary funds for the Secretary of Agriculture and "gave to USDA the legal and political flexibility to fund research at colleges and research institutions not previously considered eligible."[1] Using the language of the new bill which authorized the Secretary to "facilitate the work of the department," in September 1966, Dr. George Mehren, assistant secretary of USDA, requested the National Academy of Sciences (NAS) to recommend ways and means of allocating $283,000 for research at black land-grant colleges which had been made available under Public Law 89–106.[2] Thus, according to a recommended formula, funds were allocated for agricultural and food research at the original 1890 institutions, with Tuskegee being excluded. Funds actually became available in fiscal year 1967; $10,000 was granted to each institution, with an additional $123,000 divided among the 16 institutions based on an administrative formula. To receive the basic $10,000 grant, the chief administrator of each college had to apply in writing to the CSRS/USDA through the Director of the Experiment Station in his state, and submit a general plan for the research to be undertaken. The Hatch Act of 1887 funding system, from which black institutions had been virtually excluded, served as a model for formula funding of 1890 agricultural research programs. Sustained funding of 1890 research favored joint planning and research coordination with State Agricultural Experiment Stations. As a result, each institution received an average annual rate of $17,658.50 for fiscal year 1967. These funds were administered by the USDA's Cooperative State Research Service.[3] In order for an institution to become eligible for its proportional share of federal funds above the basic grant of $10,000, each had to submit specific research project plans to CSRS through the State Agricultural Experiment Station.

Funding at this very minimal level continued for the next five years. However, having gotten a foot in the door, the 1890 institutions made the most of their meager appropriations, at the same time mounting more effective tactics and political measures to bring greater recognition and increased funding to their campuses. The Council of Presidents/Chancellors of the 1890 Land-Grant Institutions (formerly Conference of Presidents of Negro Land-Grant Colleges) and Tuskegee University focused on the need for increased agricultural research allocations to their colleges. They found allies in the National Association of State Universities and Land-Grant Colleges (NASULGC) and the Rural Sociological Society (RSS). The support of the latter academic society can be attributed to the leadership of Dr. C. A. Williams, assistant administrator, Federal Extension Service. As a result of this collective pressure, 1890 institutions received $8,880,000 in 1972 for agricultural research. Tuskegee University, though not a land-grant college, became eligible to receive the same base amount of funds because of its leadership role in agricultural research and experiments. This action was taken with the full endorsement of the Council of Presidents/Chancellors of 1890 Institutions who unanimously endorsed a letter to CSRS which said: "The Presidents of the sixteen 1890 institutions, at their annual meeting last year, voted unanimously to include Tuskegee Institute among the land-grant institutions for a share of the funds requested for FY '72."[4] It amounted to taking 1/16 of the funds from 1890 institutions and making a full share for Tuskegee.

The struggle to arrive at the 1972 level of funding, which marks the true beginning of agricultural research support at 1890 institutions, involved many participants of outstanding stature. Dr. Richard D. Morrison, President of Alabama A&M University, was perhaps the foremost participant. As early as 1955, he was serving on a Joint Committee of USDA and NASULGC discussing the role of black colleges in research and extension. While there appeared to be sympathy for the cause of blacks, there was always a question of how federal funds could be diverted from 1862 institutions to black institutions. Morrison recalls a meeting with Secretary Orville L. Freeman of the USDA in which he asked Freeman, "Why can't you use some of the money of the USDA for black institutions?" Freeman made the standard reply: "No money is provided by law" for your institutions. In an effort to get Freeman to allocate some of his vast discretionary funds to research by black institutions, Morrison pointed to the large sums received annually by Auburn University in his own state. The Secretary retorted: "You will never get any of Auburn's money." Morrison responded: "I don't want any of Auburn's money, but we want a bill to give us money. Just as a bill could be passed for Auburn and 1862 universities, a bill could be passed for 1890 institutions."[5]

The quest for more adequate funding became virtually an obsession with Morrison and other presidents of the Council of Presidents/Chancellors of 1890 Institutions. During an interview Morrison recalled some of the kinds of humiliation to which he and other presidents and their faculties were subjected. For example, they were asked: "Are these institutions ready? Do they have the personnel and facilities?" He recalls a Secretary of Agriculture who told him categorically: "You will never see the day when you'll make as much money as whites." Even though from time to time he could discern some progress for 1890 institutions in improved federal funding, Morrison admits, "I used to leave meetings thinking that these are some of the most prejudiced people in the United States."[6]

Mayberry and his committee in *Development of Research at Historically Black Land-Grant Institutions* reported that "Throughout 1970 and well into 1971, an ever increasing number of agencies, organizations, offices, and individuals joined in efforts to bring about an expansion of resources available to the Colleges of 1890 and Tuskegee Institute for Research."[7] The intensity with which the problem of funding was being pursued led Secretary of Agriculture Clifford M. Hardin to accept an invitation from Dr. Morrison to discuss it with the presidents and chancellors of the predominantly black land-grant colleges and their deans of agriculture, members of the RSS, and others, looking for ways in which USDA could help and also encourage cooperative projects. While Hardin emphasized that because of budgetary cutbacks, he could not make any promises, he did call for a committee to work with his staff to help achieve some of the desired goals by 1972.[8]

In the spring of 1970, a special committee was formed to work with Mr. Barnes, an aide to Secretary of Agriculture Haidin, on matters concerning USDA policies and the 1890 institutions. This committee was to clarify all federal legislation pertaining to federal funds for the 1862 and 1890 land-grant institutions. The committee recommended a number of alternatives as to how the 1890 institutions could share more equitably in federal funds. Some alternatives were: develop amendments to the Hatch and/or Smith-Lever Act; develop more comprehensive legislation for research and development and public service; revise the Second Morrill Act; expand PL 89-106 for research; and enact special legislation.[9] The task of convincing the powers that be was the challenge that lay ahead.

On Sunday, November 8, 1970, Morrison, representing the Council of College Presidents/Chancellors, spoke on "Funding: 1890 Land-Grant Institutions" before the Experiment Station Committee on Organization and Policy (ESCOP), the Extension Committee on Organization and Policy (ECOP), and the Executive Committee of NASULGC.[10] His background data emphasized that all of the historically black land-grant institutions which were servicing over 50,000 students were fully accredited by their regional accrediting association. He further pointed to their academic strengths and changing character in the following manner:

> In 1969, the faculties of the 1890 institutions were composed of 3,035 persons, of which 836 had earned Ph.D. degrees from many of the most prestigious universities in America. Among the 50,493 students taught at these 1890 black and (slightly) white institutions—(2,446 white students) there were 1,441 majors in agriculture and 1,984 majors in home economics...The total black enrollment in the sixteen Southern 1862 major land-grant institutions was 4,618.[11]

Other revealing data was presented to the Joint Committees to show the inequities between 1862 and 1890 land-grant institutions. Throughout the existence of the predominantly black land-grant institutions, they have not been permitted to share in Hatch Act funds, nor have they been included among the institutions that receive Smith-Lever Act funds. In 1968, the sixteen 1890 institutions received only $1,376,987, whereas the sixteen 1862 institutions located in the sixteen Southern states received $59,261,162. Stated another way, the same sixteen 1862 institutions, with only five times more students (257,248) than the sixteen 1890 institutions (50,594) received 43 times more federal funds than the 1890 institutions.[12]

Other evidence compiled by the Office of Civil Rights showing gross inequities between the white and black land-grant institutions in the South was available to help make the case for increased funding. For example, in fiscal year 1968, the predominantly white land-grant colleges in states where black land-grant colleges were located received $200 million from various agencies of the federal government—11 times the amount of just over $18 million which predominantly black land-grant colleges received. Some specific comparisons of white and black funding showed the following:

> The University of Georgia, with 10 times the enrollment of Fort Valley, received nearly 24 times as much in federal aid. The University of Florida, with less than five times the enrollment of Florida A&M, received 24 times as much in federal aid. Virginia Polytechnic Institute, with only 1 1/2 times the enrollment of Virginia State, received five times as much in federal aid. North Carolina State, with less than 3 1/2 times the enrollment of North Carolina A&T, received nearly nine times as much federal aid.[13] (See chart showing differential funding in 1968.)

Morrison ended his presentation with this emotional appeal for black land-grant institutions to be included in USDA's budget:

> "You are in a strategic position, at this time, to come to the aid of a group of institutions who, through the years, have literally made brick without straws. Incidentally, they have made some pretty good bricks, in spite of great handicaps. Take a look at their graduates who are making important contributions to society. All of us realize that 'BETTER BRICKS CAN BE MADE WITH STRAWS.' "[14]

Faced with these statistics and operating in a climate where the Office of Civil Rights, at the insistence of the National Association for the Advancement of Colored People (NAACP) and other civil rights groups, was demanding equal opportunity in higher education, the USDA provided its first major funding for agricultural research at 1890 institutions. Although the $8.88 million was a quantum leap in funding, "this support was available only in the form of individual grants, which sometimes led to isolated, uncoordinated research efforts and limited researchers' ability to respond to new scientific opportunities."[15] With the passage of the Food and Agriculture Act of 1977 (PL 95–113), the 1890 institutions began to receive sustained institutional federal funding for agricultural research. This Act gave 1890 institutions and Tuskegee University the ability to assist their scientists in developing long-range research programs and thus make more significant contributions to the nation's agricultural research system.

With the advent and growth of federally-financed research at 1890 institutions, an Association of Research Coordinators was formed in 1972 to work together to increase funding, to share findings on research projects at their schools, and to cooperate on matters of mutual concern to all. In 1977, the research coordinators became research directors, and became known officially as the Association of Research Directors (ARD). The ARD

> (a) coordinates all Agricultural and Home Economics Research Activities among the historically black land-grant colleges and universities and USDA, other federal and state agencies and private industry; (b) coordinates research program planning and budgeting with the Experiment Station Committee on Organization and Policy (ESCOP), USDA and OMB; and (c) cooperates with appropriate national bodies in developing and monitoring legislative laws affect-

ing Research, Extension, Teaching, and International Programs at the 1890 land-grant colleges and universities.[16]

ARD is incorporated in the State of South Carolina and is based at South Carolina State College.

Among the many important functions of the ARD is the sponsorship of biennial research symposia and an awards program—the Morrison-Evans Outstanding Research Paper Award. Public awards are made at the biennial research symposia of ARD. Recipients of the prestigious Morrison-Evans Award are as follows: William L. Peters, Florida A&M University and Booker T. Whatley, Tuskegee University, 1976; P. S. Benepal, Virginia State University, 1977; Lewis W. Jones, Tuskegee, 1978; Bharat Singh, Alabama A&M University, 1979; Luke M. Mugwira, Alabama A&M University, 1980; Sunil K. Pancholy, Florida A&M University, 1981; Val T. Sapra, Alabama A&M University, 1982; Marguerite R. Howie, South Carolina State College, 1985; and P. K. Biswas, Tuskegee University, 1987. At the Eighth Biennial Research Symposium of ARD Award Banquet at the Hyatt Regency, Crystal City, Arlington, Virginia, Samuel Donal of Alcorn State University, the toastmaster, proudly reported evidences of growth in research at 1890 institutions by pointing to the increase in research papers presented at the annual symposia from 80 in 1980 to 400 in 1989. That ARD had achieved national recognition was also demonstrated by the presence of The Honorable E. de la Garza, Chairman, Committee on Agriculture, U. S. House of Representatives.

Substantial funding enabled 1890 institutions to do long-range planning and increasingly implement effective agricultural research projects.

Federal Funds Granted to 1890 Institutions
and Tuskegee University by CSRS

Period	Research Funds
FY 1967	$ 283,000
FY 1972	8,883.000
FY 1977	13,352,000
FY 1982	24,300,000
FY 1985	23,470,000
FY 1989	24,300,000
FY 1990	25,300,000

Mayberry and his associates found that in making plans for long-term research several factors were uppermost among 1890 institutions and Tuskegee. These were: (1) national priority research needs, (2) local and state research needs, and (3) availability of essential resources including money, qualified and interested personnel, facilities, and accessories.[17] The major areas in which research activities took place were (1) Animal Science, (2) Natural Resources, (3) Human Nutrition, (4) Plant and Soil, and (5) Rural Development. Under these five topics, during the first nine years under CSRS funding, 234 research projects under 87 research programs had been completed or were still in progress. The early success in research clearly showed that given an opportunity, these formerly neglected historically black colleges had come into the mainstream of the nation's agricultural research system. They were engaged in projects that were not only of local and national significance, but of special value to rural, minority clients of limited means. R. L. Lovvorn, former administrator, CSRS/USDA praised 1890 institutions and Tuskegee in these words: "Not only have they demonstrated a unique capability for understanding problems confronting minority races and disadvantaged groups, but they have also shown they possess the motivation, training, ability, and desire to work toward solution of problems facing our entire society."[18]

In a report of the Committee on Allocation of Research Funds to Selected Land-Grant Colleges in 1966, it was recommended that agricultural research be broadly interpreted to include farming and ranching; all aspects of forestry; home economics; management of all rural lands and associate waters; the regional flora and fauna; and the economic, social and aesthetic needs of the people. In addition, certain related disciplines—biological and physical sciences, economics, and sociology—should be considered as integral parts of agricultural research.

Some institutions encouraged research efforts in several related disciplines rather than in agriculture and home economics alone. For example, Dean R. Grant Seals of the School of Agriculture and Home Economics at FAMU, appointed Dr. J. H. Dihllon to lead rural development research at the University.

In a study by Dr. Dhillon, "An Overview of Social Science Research at Historically Black Land-Grant Colleges and Universities (1890 Institutions)[19]," it was found that when research monies became available to 1890 institutions from CSR in 1972, relatively few black social scientists trained or eager to do research on rural problems were to be found on their faculties. Only 255 out of a total of 10,898, or 2.3 percent of the total Ph.D. degrees in the social sciences were awarded to blacks. Even among this small number of doctorates, teaching and administrative roles were more inviting than research. Under CSRS, funding for social science lagged behind agricultural research. As Dhillon explains: "It seems that most of the decision makers at 1980 schools for the distribution of CSRS funds initially were less than enthusiastic about the legitimacy of social science research in the overall agricultural program."[20] However, under the advocacy of CSRS leaders and some presidents and chancellors, social science research was accepted as a limited partner in the agricultural research mission of 1890 institutions.

The table on the following page shows the amounts and percentages of CSRS/SEA-CR funds allocated to social research at 1890 institutions from 1967 to 1980.[21]

Further, Dhillon found that in cases of schools that do not have formal agricultural programs, such as Kentucky State University and the University of Arkansas at Pine Bluff, the allocations are much higher for social sciences than at other schools. Also, these percentages tend to be somewhat higher at schools where the SEA-CR program researcher happens to be a social scientist, e.g. North Carolina A&T and Tennessee State University. While there is a highly uneven pattern of funding of social science research at the various colleges and universities, increased funding in future years seems likely. The fourteen-year average for all institutions comes to 18.6 percent.

Over the fourteen (1967–1980) years, 227 social science research projects were produced in the sixteen land-grant colleges and Tuskegee with SEA-CR funds. The popular areas for social science research at 1890 institutions were: (1) Rural Poor, (2) Small Farmers, (3) Socioeconomic Development, (4) Quality of Living, (5) Rural Family, (6) Cooperatives, (7) Leadership, (8) Rural Elderly, (9) Housing, (10) Marketing, (11) Social Structure, (12) Delivery of Services and Utilization, and (13) Health Care.[22] Since 1890 institutions will have selected rural development as a major focus, it appears that there must be close cooperation between social scientists and agricultural scientists to improve the quality of life for rural, limited-resource people. Another landmark for social research at these institutions was the development of a regional research project with eleven member institutions. The project was called "Isolation of Factors Associated With Levels and Patterns of Living in the Rural South." Also on a regional level, professors Dhillon and Howie edited an excellent volume, *Dimensions of Poverty in the South*.[23]

There is an increasing need to design research programs in such areas as: (a) crime in rural communities and its impact on minorities; (b) changing political structure in rural communities and its effect on minorities; (c) processes of desegregation and their impact on community decision-making; (d) status and role of black churches in rural areas; (e) impact of selected federal, state, and local programs on minorities; and (f) profiles of black businesses in rural areas and their survival mechanisms, and critical variables in the development of new businesses.[24] An overview of selected examples of outstanding research at some of the 1890 institutions will give insight into the quality and quantity of research that has been achieved during the last two decades.

One of the most notable and early researchers at FAMU under CSRS is Professor William L. Peters. Joining the University in 1966, he began the task of establishing an academic program in entomology with a meager appropriation from the School of Agriculture which was then under the deanship of Dr. C. E. Walker. Subsequently, under Dean R. Grant Seals, Peters was appointed FAMU's Research Coordinator. Over the past 22 years, Peters has developed a research program in aquatic insects, especially mayflies (Ephemeroptera) that has made FAMU nationally and internationally known in that field of science. Operating primarily under awards made available by the Cooperative State Research Service and lesser amounts from various agencies in the State of Florida, he has been awarded more than $3.5 million in grants since 1968. Over 25 researchers have visited Professor Peters' laboratories during the last 20 years, even coming from countries of North and South America, Europe, Asia, Africa, Australia, and New Zealand.

Peters' research covers several areas: (1) the discovery and description of new species of mayflies; (2) an understanding of relationship of mayfly species; and (3) the biology and environmental requirements of aquatic insects. As a result of his research and professional influence the Entomology Department at FAMU ranks among the finest in the nation and the department has one of the largest comparative collections of mayflies in the world. By joint agreement, the insect collections at FAMU are part of the Florida Collection of Arthropods, a branch of the Florida Agricultural Consumer Service. The impact of Peters' leadership in mayfly studies may be seen in the organization of the First International Conference on Ephemeroptera at FAMU from August 17–20, 1970, with participants from Canada, Sweden, France, Bulgaria, Hong Kong, the Philippines, Australia, and South Africa. Since the initial conference, five additional international conferences have been held in Crakow, Poland; Winnipeg, Canada; Ceske Budejovice, Czechoslovakia; Melbourne, Australia; and Granada, Spain.

Each year, the FAMU Entomology Department sponsors a workshop for pest control operators as a part of its continuing education outreach efforts which is coordinated by Peters in cooperation with the Florida, Alabama, and National Pest Control Associations in their training programs and activities. Peters has published more than 125 papers in leading journals throughout the world, has written a chapter in an Australian textbook, *The Insects of Australia*; and is a member of the Board of Editors for the second edition of *The Glossary of Entomology*.

Out of FAMU's research in entomology, other notable results have been achieved. Dr. Manuel L. Pescador, professor of entomology at FAMU, has joined the renowned Professor Lewis Berner of the University in writing *The Mayflies of Florida: Revised Edition.*[25] This volume provides comprehensive and up-to-date information on the natural history and biosystematics of Florida mayflies, and treats a total of 71 species, a significant increase of 23 since 1950.

Following in the footsteps of Dr. George Washington Carver of Tuskegee University, researchers at FAMU are pursuing highly significant research in the study of the peanut. Dr. Mehboob B. Shelkh, Professor of Biochemistry and Plant Physiology, is engaged in a project entitled "Effects of Genetic, Agronomical, and Environmental Factors on Peanut Seed Quality." The overall objective of this peanut research is to enhance the seed quality by developing appropriate technology that would lead to the improvement of flavor and nutritional characteristics of the seed. The principal researcher believes that "Seed protein with high nutritional value similar to animal protein will enable development of food products which would have a significant impact on dietary and social habits of people and may create a new generation of vegetarians deriving their protein requirement from the seeds."[26]

In the area of entomology Professor Charles W. O'Brien, professor of Entomology at FAMU, is researching the "Comparative Ecology and Systematics of Selected Aquatic and Terrestrial Insects." The primary objective of this research is to aid in the development of the technology necessary for biological control of aquatic weeds in Florida and in other parts of the United States as well as in Africa, Asia, and Australia. In addition, studies are undertaken to solve specific economic problems (agricultural, forest, and ornamental) which require taxonomic research, both in Florida and in various foreign countries. This study is of tremendous significance to farmers and the American public. For example, aquatic weeds cost hundreds of millions annually with costs to agencies of the State of Florida alone exceeding $20 million annually for the control of Hydrilla verticillate. The economic benefits alone are enough to justify this research in Florida and other parts of the world.

Again, at Florida A&M University a team of professors, Y. P. Hsieh (Project Leader), Charles L. Coultas, and C. H. Yang are conducting research in the area of "Wetland Ecology." Wetlands are an important natural resource, serving as rich habitats for fish and wildlife and places for water purification and storage. Thus, the main objective of this project is to provide baseline ecological information on the wetlands in North Florida for the purposes of protecting and managing them. The research includes the study of the dynamics of carbon, nitrogen, phosphorus, and sulfur cycles, the evaluation of water purifying capacity, and the construction and restoration of wetlands. With the state of Florida having witnessed a deteriorating of wetland from one-half to one-third within a fifty-year span, the importance of this project to the state is obvious.

These and other research projects under the capable leadership of Professor S. K. Pancholy, FAMU's Research Director, are making significant and worthwhile contributions to the state and the nation.

Under the directorship of Dr. Melvin E. Walker, Jr. and subsequently of Dr. Charles Magee, Fort Valley State College has had a significant impact in the State of Georgia through varied research projects in the general areas of Agriculture Economics and Rural Sociology, Agricultural Engineering, Animal Science, Home Economics, and Plant and Soil Science. Beginning with an allocation of $18,836 and two part-time scientists in 1967, the College in 1988 had 18 scientists working on more than 20 agricultural projects. These projects were designed to (1) improve the ability of the agricultural sector to provide quality food and fiber in the quantity and at a price that consumers can afford to pay; and (2) assess those factors which enhance the environment and influence the levels of living of rural residents, both farm and non-farm.

Highly significant among Fort Valley State College's research in agricultural engineering is the outstanding work of Charles Magee, the current Agriculture Research Director and project leader on "The Storage of Leafy Vegetables in Ice-Walled Containers." His original objectives were (1) to determine the storage life of mustards, collards, and spinach stored in ice-walled containers that released chlorinated water over a period of time; and (2) to determine the weight loss of mustards, collards, and spinach stored in ice-walled containers under refrigerated storage conditions.[27]

To achieve the desired objectives, Magee invented a reusable "water-drip" container that can be used to precool, ship, and store fruits and vegetables. The U. S. Patent Office assigned this device Patent No. 4,845,959 on July 11, 1989. This became the first patent ever issued to a member of the faculty at FVSC. His container's key feature is a frozen block of ice enclosed in a cavity (wall). After being inserted into the lid of a styroform chest, the cavity's ice melts and drips cold water on the product below. The extended shelf life the container gives produce can benefit supermarkets, produce transporters, conveniennce stores, greenhouse operators, and roadside and farmers' market vendors. Instead of the normal ten days, the cooler will maintain freshness for 30 days.[28]

Since 1973, beginning with a project initiated by Houston Stallworth, agricultural scientists at FVSC have also been involved in peach research designed to study "peach-tree-short-life," a malady of unknown cause, which had seriously threatened the peach industry in Peach County and the southeastern section of Georgia. In cooperation with the State Experiment Stations, FVSC scientists became leaders of regional efforts with the Southeastern Fruit and Tree Nut Experiment Station in close cooperation. This research has been continued and intensified over the years under Dr. Unedi L. Yadava, a professor of horticulture who received his training at the University of Illinois.

Over the last several years, and with present projects planned to 1991, Professor Yadava has been engaged in the following two research projects: "Longevity, Hardiness, and Production Physiology of Fruit Crops in Middle Georgia," and "Introduction, Evaluation, and Production of Exotic Fruit Crops in Middle Georgia."[29] In the first project he seeks (1) to determine rootstock effects on scion hardiness, tree survival, and orchard performance in relation to peach-tree-short-life; and (2) to evaluate peach-tree-short-life in perspectives of phytohormones and gas exchange activities. Since the peach crop is so essential to the agricultural economy of Georgia, this is a very important area of research. Additionally, Yadava is investigating the feasibility of commercial cultivation of exotic fruit crops (i.e., ber, guava, kiwi fruit, and papaya) under Middle Georgia conditions. These crops appear to hold considerable economic potential for the State.

Other notable studies at FVSC include "A Preliminary Examination of the Demand, Knowledge, and Use of Goat Products" by Dr. M. C. Nelson and "Factors Influencing the Reproductive Performance of Goats" by Dr. E. A. Amoah; "Physiological Processes for Sweet Potato Improvement" by Dr. A. S. Bhagsari and "Sweet Potato Product Development" by Drs. D. B. Conteh, S. K. Hunt, and L. D. Johnson, as well as many others. Acting President Melvin E. Walker, Jr. of FVSC believes that the School of Agriculture and Home Economics is making contributions to agricultural research far beyond what its financial resources indicate that it should.

Since 1967, Delaware State College has become increasingly involved in agricultural research. With the initial funds from CSRS, Dr. Ulysses S. Washington, project leader and Dean of Agriculture, studied "The Yield and Growth of Soybeans as Affected by Modifications in Soil Profile," and Dr. Edward R. Jones researched "The Response of Soybean Varieties to Nitrogen Fertilizer." Federal funds for agricultural research during the 1970's were used to support three research programs: (1) "Evaluation of Livestock Feeding and Feed Production Systems in

Delaware," (2) "Natural Resources Habitat Manipulations," and (3) "Socio-Economic Problems of Non-Urban People of Delaware."

During the 1980's the many projects supported by federal funds for agricultural research included: (1) "Factors Affecting the Development of Phytophthora Root Rot of Alfalfa in Delaware," with Dr. Edward R. Jones as project leader; (2) "Farm Pond Management in Delaware: Minnows as Forage Fishes and the Potential for other forms of Agriculture," with Dr. Bernard Petrosky as project leader; (3) "A Components Analysis of the Aid to Families with Dependent Children (AFDC) Program in Delaware," Dr. Richard Bieker, project leader; and (4) "An Evaluation of Culinary Herbs and Essential Oil Plants as Cash Crops," with Dr. Arthur O. Tucker as project leader. From the latter project, Professor Tucker and his associates have published many articles in referred journals including "The Essential Oils of Some Rosemary Cultivars," "Biological Aspects of Commercial Sage," and "Catnip and the Catnip Response." The various studies of culinary herbs should have considerable commercial application both at home and abroad.

Kentucky State University, which discontinued agriculture in the early 1960's, but retained its land-grant status, has the Home Economics Department as the center of its land-grant activity. Additionally, it has two strong programs related to land-grant status: its Community Research Service and its Cooperative Extension Program.

The Community Research Service (CRS)Program at KSU under Research Director Dr. Harold R. Benson is designed to help resolve problems facing rural Kentuckians through research in such areas as agriculture and natural resources; human nutrition, health, and home economics; plant and soil science; and rural development. During the 1980's research projects have included those investigating the material well-being of rural elderly persons in the South; obesity among the elderly; the presence of histoplasma capsulation in bird-roosting sites in Kentucky and the Southeast; and the effects of mineral intake on human health.[30] One outstanding project, with Dr. Kuo Shii Jiang as principal investigator was entitled, "Biological and Behavioral Variables Associated with Subclinical Malnutrition of the Elderly." This three-phase project attempted to use trace elements—zinc, cooper, and magnesium in the blood, hair, and nails—that appear to be key inorganic indicators for studying malnutrition among the elderly. Also, the study enabled researchers to compare the zinc concentration of the elderly with their levels of depression and taste acuity.[31]

Other projects included research into the effects of acid rain on agricultural crops; the development of mineral-resistant agricultural crops; the mass production of superior forest trees; the economic efficiency of grain farming; the parenting behavior of first-time others; and home aquacultural production. Aquaculture research is a high profile area at the university which emphasizes the development of fish culture as a diversified farming enterprise including rainbow trout, channel catfish, and paddlefish production. The Aquaculture Research Service Center, which began under program director Dr. Michael Cremer, doubles as a research facility and as a demonstration and support center for fish farmers.[32]

In 1985, KSU, with funds from the U. S. Department of Agriculture, improved CRS's capabilities of doing research by renovating the university's old Underwood Cafeteria into a primary research facility with modern laboratory equipment at a cost of $3.7 million. Additionally, CRS expanded its research facilities in 1985–86 with the acquisition of a 165-acre research farm in Franklin County, located a few minutes' drive from the university campus. The farm, purchased with federal funds, is targeted for research into field crop production and storage, fish production, crop pest control, tree culture, and horticulture.[33]

Under the leadership of Dr. Winfred Thomas, and currently Dr. James W. Shuford, Dean of the School of Agriculture and Home Economics and Research Director at Alabama A&M University, outstanding agricultural research is being conducted annually which has a vital impact on the local, state, national and international scene. In 1973, AAMU initiated the triticale breeding, production and utilization program with funding from CSRS. By 1978, the university's triticale research program was reputed to be the largest such program in North America and became known for its contributions in developing and distributing triticale germ plasm. Triticale is a wheat and rye hybrid which is becoming an important grain and forage crop in many parts of the world. In the United States it is being utilized as a forage crop for grazing, silage making, poultry feed and food products such as bread, cookies, and breakfast cereals.[34]

The two major varieties of triticale developed by agricultural scientists at AAMU are called "Councill" (1979) and "Morrison" (1984) named for the first and fifth presidents of the University, respectively. Additionally, a "Thomas" variety was developed in 1987. So successful is the Triticale Breeding Research activity that it has attracted scientists from many countries including Mexico, Canada, Brazil, England, France, Australia, and India. Also, Alabama A&M's triticale lines have been distributed to such countries as Kenya, Cameroun, Upper Volta, Pakistan, India, Egypt, Union of Soviet Socialist Republics, and many western European nations. According to Dr. V. T. Sapra, a principal investigator in triticale research and the author or co-author of more than 75 published articles on the triticale or related subjects, "Many new forage lines are being tested in forage tests at several locations in collaboration with Auburn experiment station...In 1979, 200 successful crosses were harvested."[35] Since the study began in the early 1970's, studies have shown that grain yields had essentially doubled by 1980. Also the "Morrison" variety produces good forage yield in the fall and early spring because of the vigorous upright growth habits.

The variety of research activities in which scholars of the School of Agriculture and Home Economics are engaged are indeed numerous. They include extensive study on soybeans, e.g., screening and selecting improved germ plasm for adaptability to acid soils and disease resistance; productivity under a closer row-spacing and double-cropping system; developing cultivars with superior qualities; and developing improved foods from soybean protein isolates. Soybean researchers include J. W. Shuford, L. M. Mugwira, G. C. Sharma, V. T. Sapra, McArthur Floyd, and Clauzell Stevens, to name a few. In the study of the genetic improvement of Virginia pine trees as Christmas trees, George Brown, Jr. has been active as a principal investigator. Also, somewhat unique and important at AAMU is a project called "Remote Sensing Research Related to Agriculture and Natural Resources" by Oscar Montgomery. This research is aimed at developing methods of quantifying soil differences using spectral data acquired from the Landsat satellite system as means of reducing the time consuming field boring expeditions employed in the conventional methods of soil survey. This process is implemented through the Alabama Center for the Application of Remote Sensing (ACARS) within the Department of Natural Resources and Environmental Studies at AAMU. The further refinement of this on-line interactive remote sensing-based geographic information system for inventorying and monitoring the natural resources of Alabama will drastically reduce time and cost in soil analysis and land use need throughout Alabama.

Agricultural research at Alcorn State University, which is currently under the directorship of Dr. Samuel L. Donald, has a threefold goal: (1) increasing income opportunities for low-income rural dwellers in Southwest Mississippi; (2) improving and conserving the quality of the environment; and (3) meeting basic human needs in rural development/ food, nutrition, clothing, and housing. A listing of some of the research projects will show the impact and diversity of Alcorn's programs: "Maximizing Performance from Cattle on Legume-Supplemented and Non-Legume Supplemented Pastures"; "Factors Influencing the Survival of Small Farms in the South"; "The Effects of Herbicides and Their Breakdown Products on Selected vegetable Crops"; "Biodegradation of Animal Waste: Evaluation of Single Cell Proteins as Feed"; "Effects of Dietary Patterns on Diseases and Behavioral Changes"; and "Feeder Pig Productivity for Low-Income Rural Dwellers in Southwest Mississippi."[36]

While agricultural research at Alcorn may have national and international implications, by and large it is geared toward solving problems in Southwest Mississippi. A step toward solving problems was made in 1970 when Dr. Walter Washington of Alcorn State University and Dr. William L. Giles of Mississippi State University appointed a committee which asked that a branch of the Mississippi Agricultural and Forestry Experiment Station be established on the campus of Alcorn State University. In 1971, the Mississippi Legislature passed Senate Bill Number 2077 establishing a branch on the campus of ASU and appropriated funds to implement the research program. Thus, the Alcorn Branch Station became the 10th branch of the Mississippi Agriculture and Experiment Station.[37]

The newest Branch Station at Alcorn is unique in that it is associated with two universities and all station scientists hold joint appointments with ASU and MAFES. Poverty is a serious problem in Southwest Mississippi, and in many cases families are attempting to eke out a living from the operation of small farms. Off-farm employment offers little hope for a higher standard of living. So since its inception, the mission of the Alcorn Branch Station has been to conduct a research program designed to enhance the income potential of alternative agricultural enterprises. Much of the research has been centered around feeder pigs and fruits and vegetables for low-income rural residents.

Since 1971, modern swine facilities have been constructed at the Branch Station. This has enabled Dr. H. E. Grier of Alcorn to work cooperatively with Dr. B. Baker and Dr. B. G. Diggs of Animal Science and others at Mississippi State University to develop an excellent research program in feeder pig production designed to raise and stabilize the income of low-income rural residents.[38] The research has included various ways of providing iron to baby pigs, various sources of providing heat for baby pigs, irrigated pastures from the aerobic lagoon to reduce feed cost, and swine disposal. As a result of the feeder pig research, a large number of farmers are now producing pigs for the market. In addition, beginning in 1985, a feeder pig sale was initiated at the Branch Station to provide local producers with the opportunity to purchase high quality animals and enlarge their herds.

Another successful research project featuring Dr. C. C. Singletary and Dr. J. P. Overcash of Horticulture at MSU and Dr. S. L. Windham, W. O. Thomas and Dr. S. C. Tiwari of ASU focuses on fruit and vegetable production for low-income rural residents. The fruit and vegetable research includes cultural, fertilizer and variety experiments with tomatoes, peppers, cucumbers, strawberries, blackberries, blueberries, sweet corn, cabbages, okra, sweet potatoes, white potatoes, watermelons, muscadine, field peas, snapbeans, broccoli, cauliflower, Chinese cabbage, table grapes, peanuts, sweet sorghum, mustard greens, and multiple cropping in soil and water rotation. This fruit and vegetable research at ASU is especially important to Southwest Mississippi which leads the state in hot pepper, green peanut, white potato, and syrup production.[39] The success in the above research is a fitting memorial to Dr. J. A. Morris, the first superintendent of the Alcorn Branch until his untimely death on June 8, 1980. The value of the Branch Station may be seen in the fact that approximately 15,000 visitors usually attend the annual field day, and another 3,000 visitors tour the station annually seeking useful information.

Since 1979, the International Dairy Goat Research Center (IDGRC) has experienced phenomenal growth and development at Prairie View A&M University (PVAMU), and has made a tremendous impact on the state, national, and international levels through its outstanding research activities in the goat industry. From its inception, its mission was "to pursue and excel in goat research and to generate and disseminate technical information to goat farmers on overall goat management and care at both the domestic and international levels."[40] The Center is a unit within the College of Agriculture at PVAMU which is, in turn, a member of the Texas A&M University System.

Goat research is one of the three major components of the Cooperative Agricultural Research Center (CARC) at the university. The three are: Caprine Research Program; Environmental Quality Research Program; and the Food Quality and Safety Research Programs. Currently, they are under the directorship of Dr. Alden H. Reine. Researchers at PVAMU are increasingly demonstrating that goats are an important economic farm animal, and with low initial purchase and maintenance costs, are within easy reach of low income farmers. Goats can be grazed on marginal land, integrated into cropping systems, and be fed agro-industrial by-products and crop residues, thus minimizing feed cost. They have the ability to convert renewable resources into meat, milk, and cashmere fiber. So over the years, IDGRC has played a pivotal role in providing both the knowledge and technology transfer to stimulate the industry's development.

In 1988, scientists in the Caprine Research Program initiated over a dozen research projects, utilizing both dairy and cashmere goats. Some projects focused on finding ways to improve the health and nutritional status of goats, while others looked at reproductive efficiency. The research projects were in four specific areas: nutrition, animal health, reproduction, and cashmere goats. The latter area is one that deserves specific emphasis and holds tremendous promise for PVAMU and Texas.

It is of significance that IDGRC has taken the leadership in mapping a strategy to develop a cashmere production in Texas and the nation. PVAMU studies showed that the world annual production of cashmere in 1988 was down about 5,000 tons, and that the two major cashmere processing plants in the continental United States are dependent on imported raw materials for the development of a domestic cashmere production industry. Preliminary data have indicated that the environment of Texas is conducive to cashmere production. A cashmere hair sampling survey using 155 goats from several different breeds indicated that the Spanish and the Tennessee Stiff-Legged goats have the highest and longest yield of cashmere of all goats sampled. Ultimately, a $200 million industry could be established in the United States to meet the local and export markets for cashmere fibers.[41]

In addition to the Cashmere Goat Research, four projects in nutrition were: (1) Effect of colostrum quality and sources on survival of neo-natal goat kids; (2) Protein requirements of growth performance of growing goats; (3) Phosphorous requirement on bone matrix and growing goats, and (4) Nutritional evaluation of alternative feedstuff for dairy goats. Selected topics of the types of research conducted in these areas are: "Chemical Composition of Commercially Available Goat Cheese Produced in the United States" by Y. A. Park and R. Attaie; "Effects of Graded Levels of Calcium on Growth and Bone Matrix in Dairy Goats" by S. M. Golakai, T. H. Teh, and J. L. Cutshaw; and "Concentration of Iron and Zinc and Their Ratio in Goat Meat from Alphine and Nubian Breeds" by Y. A. Park.[42]

Research at PVAMU, as at other 1890 institutions and Tuskegee, was enhanced by Congress in 1982 with an appropriation of $50 million to upgrade research facilities. The CARC at the University was awarded $7 million from the special appropriation by CSRS "to design, construct, and equip agricultural research facilities in order to conduct state-of-the-art agriculturally related research." Among the research facilities are the Agricultural Research Laboratory, a headhouse, a greenhouse, a feed mill, a poultry complex, and a swine complex. These new facilities have provided PVAMU with the office space, laboratory support and other essentials for conducting quality research and offer a base for development and growth of its research program.

Virginia State University, like other 1890 institutions, conducts research in selected research priority areas and seeks solutions to the food and agricultural problems of rural populations. The areas of research emphasis at VSU are Plant Science, Animal Science, Aquaculture, and Human Nutrition.

The aims of the plant science program are to introduce new and potentially valuable genes and to modify existing genes to improve nutritional, functional, and other desirable properties. Investigations are being conducted on the effects of air pollutants on economically important crops. Research is being conducted to determine the biochemical and physiological basis of plant resistance to air pollutant injury, and also the basis of pollution tolerance among crop cultivars. In addition, research is being initiated at VSU on herbicide absorption, translocation, and metabolism to develop effective control of weeds with minimum pesticide contamination.

Following the path taken by the University of Arkansas at Pine Bluff, VSU developed a promising acquaculture program in 1984. Research focuses on catfish, rainbow trout, and crawfish in the development of commercial cultural systems for pond production. Alternating shrimp crops with cold water fish species such as trout will also be studied in grow-out ponds to make better use of the pond area.

In human nutrition, research is aimed at seeking solutions to the nutritional problems of special population groups—the elderly, the adolescent, obese, and pregnant women. Research efforts are needed to determine good nutritional practices and discover means of encouraging the adoption of such practices among these groups. VSU, with financial support from CSRS, is beginning to make its impact felt in this area of research. Currently, the Director of Agricultural Research at VSU is Dr. P. S. Benepal.

North Carolina A&T University's research program in agriculture aims to discover new knowledge and thereby facilitate the formal training of students in agriculture, home economics and allied sciences. Research is carried out in five departments within the School of Agriculture: Animal Science, Plant Science and Technology, Agricultural Economics and Rural Sociology, Agricultural Education and Extension, and Home Economics.

Under the leadership of Dr. Burleigh C. Webb, Dean of the School of Agriculture, and Dr. Sidney Evans, past Director of the Agricultural Research Program, a variety of outstanding research projects have been completed or are still in progress since the beginning of federally-supported research. Along with various comprehensive annual reports, the public is made aware of research and extension activities through two publications, *The Scope* and *Retrospect*. Since so many of North Carolina's poor and blacks are classified as limited-resource farmers, North Carolina A&T University (NCA&T) has focused most of its research energies on small farms. As shown in *Retrospect '83*, the major topics were: "Helping Limited Resource Farmers Survive . . . And Even Thrive," "Growing Bigger Crops Faster," " Sewage Sludge—Turning It Into Liquid Assets," "Survival of Small Farms," and "The Landownership Information Projects."[43]

The emphasis on small farms derives from the fact that "More than half of North Carolina's small farmers earn less than $12,000 a year, even when their off-farm income is included. In the long run, the fate of many small farmers is closely tied to their ability to adopt modern management, production and marketing techniques."[44] This is the challenge being met by NCA&T's research/extension emphasis.

Under the major research area "Alleviation of Soil and Water Pollution and Disposal of Wastes," Dr. M. R. Reddy studied contaminant migration in groundwater, the nitrogen fixation effects on eutrophication in ponds, and the use of sewage sludges. Reddy found that sewage sludge, which is readily available, is useful as free fertilizer if concentrations of heavy metals such as nickel, lead, zinc, and copper can be effectively controlled. Since soil-testing is a free service through county extension offices, and since Environmental Protection Agency guidelines are available, with the assistance of these agencies, sludge can be used profitably by small farmers.

In the study of soybeans, Dr. Godfrey Gayles has focused on the "Effects of Soil Water Stress at Different Physiological Stages on Soybean Growth and Yields." The research showed that soybean plants produced the highest yields when irrigation was applied at the pod filling level. The success of NCA&T's agriculture research projects was recognized in 1986 with Congressional citation of three research projects: "Selenium and Reproductive Function in Livestock: by Dr. Ed Segerson, animal physiologist; "The Future of Small Farms in North Carolina" by Dr. A. S. Kahn; and "Appraisal of Soybean Germ Plasm" by Dr. M. R. Reddy.[45] This was the first time research projects from the A&T Agricultural Research Program had been recognized during a Congressional hearing.

Other projects in agricultural research at NCA&T show the variety and types of activities being carried out by the university. In a project in Home Economics, "The Effects of Home Energy Conservation Techniques on Lifestyles," Dr. Carolyn Turner studied 15 families as each lived for a four-week period in a home energy laboratory. From these experiences, she visualized ultimately developing an index of consumer acceptability/energy saved for energy conservation techniques in the home. Dr. Amos Kennedy is the leading researcher on the effects of diet on immune systems. In architectural engineering, William A. Streat was the project leader on "Demonstrations on Solar Energy Applications for Low Income Rural Housing." Utilizing the works of social scientists, NCA&T State University's Dr. Alton Thompson, a rural sociologist, participated in a regional project which was published in a book, *Dimensions of Poverty in the Rural South* (1986). Thompson commented: "We were surprised at the low utilization of government services by the rural poor. We found those living in poverty in rural areas generally were not aware of social programs."[46]

This volume pointed out that the number of people in poverty in 1983 had increased to 15% of the total population, 34.4 million people, the highest percentage in 17 years. That 1890 institutions should concentrate on poor and limited-resource clientele since

> Poverty rates are highest in the South, compared with other regions of the country and poverty is highly concentrated in Southern rural areas. In 1983 the poverty rate was 20.7% for the rural South. The poverty rate was disproportionately high for Southern rural minorities, with 42% of rural blacks below the poverty level, compared with 12% for rural whites. In 1985, of all the counties in the United States, 92% of the persistently low income counties were located in the South.[47]

The "small scale" farm sector is experiencing severe hardships with survival and balance: survival in the context of farm foreclosures and stress, both financial and mental; balance in the sense of supply and demand for educational output. Thus, the primary goal of agricultural research at NCA&T, said Dr. Didney H. Evans, "is to develop and expand our research knowledge base in order to provide the necessary information for decision-making . . . Our research efforts are directed toward reaffirming the true mission of the land-grant university."

Like other 1890 institutions, Southern University received sustained support for its research from CSRS beginning in 1967. Dean Hezekiah Jackson, who provided the leadership for the College of Agriculture during the 1960's and 1970's listed the following as the most significant indicators of progress in a report to the president of Southern dated August 3, 1970: (a) the federal government had designated Southern University as a trained manpower source for professionals in the area of Plant and Soil Science; (b) the Cooperative Summer Training Program in soil science had been expanded; and (c) the USDA and the Agricultural Research Service would cooperate with Southern University in basic applied research in agriculture, including financing such research.[48]

Growth in research has continued under Dr. Jackson's successors: Dr. George Robinson, Dr. Leroy Davis, and currently Dr. Bobby Phillips. The focal point of research in the College of Agriculture and Home Economics (units combined in 1987) is in the Center for Small Farm Research which evolved as a consequence of the "College's mission to provide meaningful assistance to a much-needed clientele." The benefits accrued from the research program are "size neutral" in that they address the needs of all clientele, regardless of ethnic background, earning potential or farm size. However, the focus is primarily on small and limited-resource farmers, their families and the rural environment in which they reside. Southern University is the first university to establish a Center for Small Farm Research on a national level. Congress appropriated $100,000 initially with a commitment for $200,000 to $300,000 annually in support of the Center.

The University had more than 15 projects in the Center for Small Farm Research. Examples of the type of proposals included "An Economic Analysis of Selected Specialty Enterprises for Small and Limited Resource Farm Operators in Louisiana" by Tesfa Ghebremedhin, principal investigator; "Factors Influencing the Survival of Small Farms in the South," by Dewitt Jones, Leroy Davis, and Phillip Cormier; "The Economics of the Earning Potential of Small Farms in Louisiana" by Dewitt Jones as principal investigator; and "Assessment of Alternative Swine Production Systems" with Calvin Walker as principal investigator. Research was carried out under the broad programs of Agricultural Economics, Animal Science, Plant and Soil Science, and Rural Sociology.

Under the leadership of Dr. Ocleris Simpson, Dean for Research and Extension at Langston University, the American Institute for Goat Research established in 1984 is making its influence felt both nationally and internationally. According to Simpson, Langston has become the "flagship" for goat research and extension services in the United States. The University is also besieged with requests from international scientists for technical assistance and training at the Institute. The Peoples' Republic of China and Mexico are two of the most recent governments being assisted by the staff of the American Institute for Goat Research and the University has an on going relationship with Brazil as well as other countries.

Two of the most outstanding agricultural researchers who are responsible for much of the success of the Institute are Dr. Christopher D. Lu, a former director of the Institute, and Dr. Frank Pinkerton, who has done outstanding research among Angora goats. Dr. Lu has now become director of international programs and during the last academic year has hosted scholars from Brazil, Argentina, Nigeria, and France. Dr. Pinkerton, who has noted the increase in the number of goats in Oklahoma said: "We can't take credit for the rapid rise in Angora goats, but we have helped a lot of people with information requests."[49] According to the USDA/National Agricultural Statistical Service's census of sheep and goats in 1988: "A Review of the Census revealed that there are now 70,000 head of Angoras in Oklahoma and 70,000 head of dairy and other goats."[50] Oklahoma is now fourth in the number of Angora goats, behind the states of Texas, New Mexico, and Arizona. The influence of Langston can be measured in part by the growth of the Angora population: "In 1983, there were five Angora ranchers in the states and they owned 300 goats. The latest figures, from December 1988, show 298 owners and 9,000 goats."[51] Pinkerton estimated that in 1989, the number exceeded 100,000 with about 400 owners. Angora goats are excellent for their Mohair yield. Among the outreach programs, Dr. Pinkerton coordinated the sale of 300 Angora goats to the Presbyterians of Wilcox County, Inc. in Grove Hill, Alabama to help this poverty-stricken county find an alternative source of income.

In addition to its work with Angora goats, Langston University has the American Institute for Dairy Goat Research. This Institute has four phases: Management, Food Technology, Marketing, and Range and Forestry Resource Management. A most recent and challenging project for the Institute of Goat Research is a study to determine if goats could replace chemicals as brush killers in forests of the U. S. Forest Service. The test will begin in the Ouachita National Forest. There will be three plots: one treated with conventional brush killer, one untreated, and one with about 50 hungry wethers from the Langston herds.[52]

The second largest research area at Langston is in aquaculture with emphasis on caged catfish. Both research and extension services are under Dean Simpson and considerable overlapping exists between the two services.

Formal agricultural research at UAPB began in 1967 with the research allocation of $16,980 under Public Law 89-106. With the growth and expansion of federal appropriations since that year, in 1990 UAPB had 40 project grants amounting to $4.6 million to conduct research in Agronomy, Agricultural Marketing Economic Development, Poultry Science, Fisheries, Rabbit Production, Entomology, Horticulture, Family Living with emphasis on Aging and Youth Development, and Housing.

As at other 1890 institutions, sustained funding at UAPB began in 1972. The first project was started in 1967 by Drs. D. J. Albritton and M. S. Bhangor who studied "Nutrient Uptake and Yield Studies of Three Soybean Genotypes as Influenced by Nitrogen, Phosphorus and Potassium Level." Throughout the first five years these professors along with other assistants studied soybean yield, root extension and other aspects of the soybean.

In 1971, Dr. S. J. Parker was appointed Research Coordinator and coordinator of Cooperative Extension Service 1890 programs at the institution. Under Parker, research efforts became more diversified. Parker himself researched a project entitled: "Biological Control of the Cotton Bollworm." Since the poultry industry is such an important part of the economy of Arkansas, Dr. D. S. Reid completed a project in 1973 on "The Effects of Mereks Vaccinations and Debeaking on Production Efficiency of Pullets and Hens." He was investigating the performance in egg production, feed efficiency, mortality and body weight.[53] Perhaps one of the most significant and lasting aspects of research at UAPB was begun in 1974 by Dr. S. J. Parker and Mr. O. R. Holiday with a project in 1974 entitled: "A Polyculture System of Fish Production for Disadvantaged Farmers in Arkansas." This study was important in the ultimate development of the very efficient and effective aquaculture studies at UAPB today. Other research sponsored by CSRS at UAPB included "Meat-Rabbit Production as Influenced by Dietary Protein and Weaning Age," and "Factors Involving Off-

Farm Employment of Low-Income Farmers in Urban and Rural Labor Market Centers." The research above was begun prior to 1977.

Since 1977, notable research has been conducted at UAPB in Agriculture and Home Economics in the areas of Aquaculture, Fisheries, Agronomy, Alternative Crops, Poultry Management, Housing and Textiles. Dr. Charles A. Walker, UAPB chancellor and an outstanding researcher himself, is determined to make UAPB one of the most effective research institutions in the South, not only in agriculture but in research in general. UAPB ranks third in Arkansas with eight percent of the research funds coming into the state—ranking above several institutions with larger enrollments and strong graduate programs. According to Dr. Walker: "Research support is an investment in the academic confidence of the faculty of an institution. We congratulate the UAPB faculty for these accomplishments."[54] Thus, Walker created in 1987-88 a UAPB Research Center which under the leadership of Dr. William M. Willingham had a banner first year through sponsoring visiting research scholars, research symposia, multi-disciplinary research programs, student and faculty research forums, mini-grants for new faculty, the university Research Journal and other local and national research publications.

Most recently, a $100,000 grant has been awarded by the Federal State Agency for International Development to help provide aquaculture research at the University of Arkansas at Pine Bluff. The grant funds a study of hydrogen peroxide on treated straw as possible feed for fish and crustaceans. UAPB will cooperate with the Illinois Natural History Survey and the Ministry of Agriculture in the Republic of Panama to conduct the research projects.[55] This is another indication of the quality of the aquaculture program at the University.

Almost from the beginning of Dr. George Washington Carver's tenure at Tuskegee University, the institution was involved in a variety of research projects which profoundly affected the course of agricultural development and agricultural economics in the South. The legacy of the Carver Research Foundation which came from Carver's life savings assured that research activities would continue at the University.

Over the years, the University has continued a dynamic research program. One of the strongest assets of Tuskegee University has been the willingness of its faculty to work together in interdisciplinary teams to tackle problems requiring scientific and technical solutions. Ongoing examples of this include the following: development and patenting new technology for growing food without soil for long-term space missions (engineering, plant, soil and food science); production of lightweight materials for space missions (chemists and engineers); production of disease-free multiple embryos from small ruminants (veterinary medicine, biology and animal science), effects of elevated carbon dioxide levels on growth of crops (plant science, biology); delivery of animal health care practices to rural farmers (veterinary medicine, cooperative extension animal science); monitoring acid rain and ozone effects on pine trees (soil science, forestry); development of innovative computer systems for managing biomedical information (clinical, administrative, business) for research (computer modelling of diseases, physiological systems) and biomedical information (veterinary medicine, biology, engineering, mathematics, computer science).

A comprehensive sweet potato research program has led to the creation of a National Sweet Potato Research Center that is conducting studies in genetic engineering, plant breeding, tissue culture, hydroponic production for long-term manned space missions, effects of irradiation on storage and quality, response to elevated atmospheric carbon dioxide levels, integrated pest management, role in sustainable agricultural systems, use of roots and foliage as animal feed, nutrition and utilization of roots and foliage tips, and the physiology of photosynthate movement into storage roots.

A Center of Excellence in Animal Production and Health includes veterinary research on anatomy, histology, toxicology, physiology, pathology, immunology, molecular biology, epidemiology, modeling and exotic animals. A program on ruminants with a strong caprine focus has been developed which includes reproductive physiology, nutrition, herd health, embryo transfer and management systems. Biomedical research is carried out in areas of genetics, immunology, cell structure, irradiation effects on human reproduction, toxicology, and parasitology. Engineering and physical sciences research programs include polymer synthesis, aerodynamics, propulsion, coal liquefaction, catalysis, digital electronics, composites, robotics, fluid mechanics, waste and energy management, and integrated circuits.[56]

From 1967 to 1971, the focus of funded research at the University of Maryland—Eastern Shore (UMES) by CSRS was on a group of projects identified as "Development of Human Resources" under the directorship of Dr. William A. Lynk. The four projects which were funded at $63,000 were designed to provide descriptive studies on several critical socioeconomic problems facing the Lower Eastern Shore of Maryland. As federal funds (primarily from CSRS) increased, research programs became more diversified. Thus, the research areas of UMES may now be grouped into four categories: agricultural sciences, marine and environmental sciences, computer and mathematical applications, and international agriculture. Because the UMES Agricultural Research Program is an integral part of the Maryland Agricultural Experiment Station, projects complement statewide needs and priorities as developed in the station's comprehensive long-term planning for agricultural research in Maryland.

Dr. Mortimer H. Neufville, who now serves as Dean of Agriculture and Research Director at UMES, continues to administer a viable and extensive research program. UMES's agricultural research projects are primarily in the crop sciences, animal sciences, and nutrition and human ecology. Given the economic geography of the Delmarva region, soybeans and poultry are among the important commodities for study. Considerable effort in the crop research program is devoted to soybeans. The goal of soybean research at UMES is to sustain a high level of production. Among the outstanding cadre of researchers in the Soybean Research Institute are Drs. J. M. Joshi and P. J. Doyle who have produced such articles as "Genetic Control, Physiology of Resistance, Culture Practices Regarding H. Zea Damage to Soybeans," and "Antibiosis Studies of Corn Earworms on Soybeans." The findings of these and other studies favorably affect the soybean industry in Maryland and other eastern states.[57]

The Animal and Poultry Research program includes projects in swine, dairy and beef cattle, poultry and crab production. While significant research has been done in swine, dairy and beef cattle, the most extensive research activities have been concentrated on the poultry and crab research areas. One of the early research projects in poultry science was "Evaluation of Chemotherapeutic Agents in Poultry Feed" with Dr. H. Womack as project director. During the mid-1980's poultry scientists at UMES, including Dr. Jeannine M. Harter-Dennis (group leader) and Dr. Anthony J. Pescatore, have explored such areas as "Assessment of the Management Practices of Small Flock Owners in Maryland," "The Characterization of Tibial Leg Problems in Heavy Broiler and Roaster Chickens," and "The Effect of Debeaking Regimen on Broiler Performance." The goals of these activities in poultry research are increased production and better management practices.

In 1973, the Crab Ecology and Mariculture (CREAM) project began with initial funding of $75,000 from the USDA to determine if an underutilized local species of crab, the Jonah crab (Cancer borealis) demonstrated biological rhythms. Through a taste testing process, UMES scientists ultimately determined the acceptability of Jonah crabs as a seafood source on the Delmarva Peninsula. Information on product availability was conveyed to local processors and as a result, Jonah crabmeat was introduced as a seafood specialty in local restaurants. In general, the mission of CREAM is to achieve a more complete understanding of the ecology, behavior and economic importance of crustaceans through a multidisciplinary approach.

Lincoln's research thrusts center around human nutrition, animal science, and crop science and natural resources. A landmark obesity study conducted with Missouri residents formed the research base for "Eating Slim." The nationally-recognized weight control plan is now known as "New Dimensions." Researchers also discovered a link between low zinc levels and the onset of diabetes in human subjects. Other studies include analyses of high-fiber diets and blood cholesterol, and potassium levels and hypertension in older adults.

Animal science studies were mainly geared toward reproduction. A beef cattle twinning project has great potential for increasing economic returns in livestock operations. An accompanying embryo transfer procedure also shows promise for the industry's future. Other research looked at estrus and fertility in sheep and the effects of stress hormones on reproduction in swine. Crop science and natural resource scientists have done work in no-till crop production, introduced alternative crops for small farmers in fruits and vegetables, and restored remnant native prairie grass.[58]

Although South Carolina State College has not had an agricultural program on its campus since May 1971 it is still making an impact, primarily with funds received from CSRS/USDA since 1967. The institution has successfully conducted and managed over $15 million of agricultural and rural research projects. Major projects focus on Human Nutrition, Rural Development, and Plant and Soil Management. The Director of Research and Extension, D. L. G. Chavous, indicates that the Research Program is "specifically designed to conduct agricultural and rural project initiatives that would enable the college to demonstrate its unique capability for understanding and addressing problems, concerns, and issues impacting negatively on the quality of life of its disadvantaged clientele, the rural poor within the state."[59]

Indeed, significant research has been conducted during the decade of the 1980's which has had a profound effect upon South Carolinians and others throughout the region. Some of the significant research studies are: "Nutritional Status Studies of Adolescent Girls in Selected Areas of South Carolina," "Food Procurement and Nutritional Adequacy of the Diet of Farm Families," "Rural Students and the Impact of Higher Education," and "Home Intervention: The Effects on Rural Head Start Children's Achievement and Home Scores." One study that had considerable regional impact was "Quality of Well-Being of Rural Southern Elderly: Food, Clothing, Shelter" (State Regional Project).

Tennessee State University, under its Cooperative Agricultural Research Program (CARP), has carried out a variety of research projects since federal funding began in 1967. Its research has been grouped under five major areas: Rural Development, Natural Resources, Human Nutrition, Animal Science, and Plant and Soil Science. The title "Cooperative Agricultural Research Program" was adopted in 1978 after Public Law 95–113, Section 1445 assured sustained funding for research initiatives under the current Director of Research, Dr. Troy Wakefield, Jr. Between 1967 and 1990, TSU researchers in CARP and in the School of Agriculture and Home Economics have been awarded more than 94 grants in the five research areas.

One of the unusual areas of research in animal science focuses on rabbit production. TSU's Dr. Richard Coppings has studied and written articles on the topic, "Management Systems for Domestic Rabbit Production." His studies are designed to "investigate methods of improving the efficiency of rabbit husbandry so that raising rabbits for meat will be more profitable."[60] In Coppings' article, "Let's Eat...Rabbit Meat," he points out that few people are aware of the value of the domestic rabbit as a meat-producing livestock species; yet "the rabbit produces more pounds of edible meat a year than any other animal."[61] Rabbits, whether raised for commercial use or home consumption, are an excellent alternative farming outlet, especially for limited-resource farmers. Likewise, in animal science, Dr. C. L. Fenderson has completed two five-year projects—"Management Systems for Beef Cattle Operation" which covered the years 1984–1989, and "Feeding and Management Systems for Beef Cattle on Limited Resource Farms," 1984–1989, as well as several other studies of beef cattle.

Researchers Drs. Roa Kari and Kieu Vo,have combined their talents to study in the field of poultry science and have focused on the factors affecting laying hens. Their first study dealt with the "Effects of Various Birds and Diket Densities on Performance of Caged Laying Hens," and a second study, in which they collaborated with Coppings' rabbit research, explored "Recycling Rabbit Waste as Feed Ingredient for Poultry." The research efforts at TSU have been quite diversified, touching on many areas of small farm living. Professors C. Johnson and R. Jones investigated "The Effects of Environmental Stress and Cultural Practices on Yield and Quality of Sweet Potato," while Dr. William Hayslett wrote an article "The Sweet Potato: The Versatile Vegetable Crop," contending that sweet potato leaves and stems, the above-ground parts of the plant, may be used as food for human and livestock feed. These parts have high nutritional value.[62] Dr. Ozie Adams and Dr. Troy Wakefield, Jr., were principal investigators of "Nutritional Status of Adolescent Females in Rural Tennessee."[63]

Dr. Hazo Carter and Dr. Kenneth Hillman have done effective investigations leading to hybrid soybeans; Dr. William Hayslett, in horticulture, has investigated the effects of environmental stress and cultural practices on landscape, nursery, and ornamental plants; Sammy

Comer has researched factors influencing the survival of small farms in the South; Surendra Singh researched small farm developments in West Tennessee as well as the marketing situation and alternatives for small farmers in Tennessee. Whether the research is on the development of tissue culture techniques for soybean improvement, the screening of turfgrass for growth in different environments, the effects of drip irrigation on the creation of scion wood for use in the production of virus-free fruit trees, or the quality of well-being of the rural elderly with reference to food, clothing, and housing, the focus is on improving the quality of life for people. As Director of Research, Wakefield, said: "CARP has always focused on research to enhance the quality of life for citizens of Tennessee, the nation and the world."[64] The variety of research in which its researchers are engaged shows that they have made a creditable beginning toward this goal.

It cannot be denied that 1890 land-grant institutions and Tuskegee University have made tremendous strides in agricultural research since 1967 when the first organized federal support began under CSRS. These institutions have conducted an ever-increasing volume of research on the problems and opportunities confronting limited-resource farmers and rural populations, especially minority groups. The selected examples of research on previous pages in this chapter indicate the quality and quantity of research activities by some of the 1890 institutions during the last 23 years, but also call attention to the benign neglect which these institutions suffered for more than three-quarters of a century. Further, they not only give clear indications of their potentials for progress and their succcess in research over the last two decades but they emphasize the losses that the nation experienced due to its unwise policies of racial segregation and discrimination against black citizens.

That black land-grant colleges and universities and Tuskegee have been and still remain less than full partners in the land-grant experience can be verified in many ways. Jim Hightower says of this apparent inequality:

> It is a form of institutional racism that the land-grant community has not been anxious to discuss. From USDA, resource allocations to these colleges are absurdly discriminatory. In 1971, of the $76,800,000 in U. S. Department of Agriculture funds allocated to those sixteen

> states with both white and black land-grant colleges, 99.5 percent went to the white colleges, leaving only 0.5 percent for the black colleges. Less than one percent of the money distributed by the Cooperative State Research Service in 1971 went to black land-grant colleges...This disparity is not by accident, but by law.[65]

The Hatch Act of 1887, which provides federal research money to "conduct original and other research," placed 1890 institutions at the mercy of southern and border states' practices of discrimination when it stipulated that research money "shall be divided between such institutions as the legislature of such state shall direct."[66]

With the exception of a few 1890 institutions like Prairie View A&M University and Alcorn State University, most did not receive any state funds whatsoever. Furthermore, the black institutions that received Hatch Act funds during the early years did not continuously receive these funds on sustained bases. In 1889, PVAMU received $5,000 for the biennium for its share of Hatch Act funds; however, a full-fledged experiment station was not established at Prairie View and this proportionate share of Hatch Act funds was short-lived. In 1934, Dr. John W. Davis of West Virginia State College could write: "Not one of the states which supports a separate land-grant college for Negroes has established an experiment station in connection with the institution for Negroes."[67] Yet funds for experimentation and research were bringing increased status and recognition to white land-grant universities.

The inability of 1890 institutions to carry out the land-grant functions of research and service for seventy-seven years, due mainly to a lack of federal funds, had an adverse effect upon blacks. In a detailed study of Louisiana Dr. R. Grant Seals found that comparable numbers of white and black farm operators existed in the state in 1930. However, by 1974, there were 90% fewer non-white operators in Louisiana than white operators. Had agricultural research and development been equitably applied, some 25,000 non-white farmers would have been farming in Louisiana in 1974.[68]

Seals goes on to attribute this travesty to inequities and discrimination in the appropriation of federal funds. For example, "The inability of Southern University to carry out its land-grant mission of rural and agricultural development is reflected in the decline of the overall black population in Louisiana and the drastic decline of black farm operators from 74,000 (in 1930) to 2700 (in 1974)."[69] Since land-grant funds were intended by Congress to be administered on the basis of rural and farm population, it is clear from this brief analysis that Louisiana did not meet congressional intent. Furthermore, any cursory analysis will show that the other sixteen states with separate land-grant institutions did not follow the legal congressional pattern in disbursing federal research and extension funds.

That 1890 land-grant institutions have made a significant impact in the Southern states can be seen in the quality and quantity of research in areas most of them never dreamed of exploring 40 years ago because of discrimination in the allocation of federal funds. But since 1967, they have increasingly engaged in research that not only affects non-white limited-resource farmers (annual incomes of $2,500 to $20,000) but also contributes significantly to the priorities established by the Southern Regional Agricultural Research Committee. They are involved in "Animal Health and Reproduction," "Biotechnology," "Crop Production and Management," "Family and Community Development," "Aquaculture," "Human Nutrition and Health," "Germ Plasm Development and Enhancement" to name a few.

The last 23 years have clearly shown that success in research is not only possible but is actually occurring at 1890 institutions. But the cost of research is high as stipulated in the booklet "Progress and Productivity Through Research and Service."

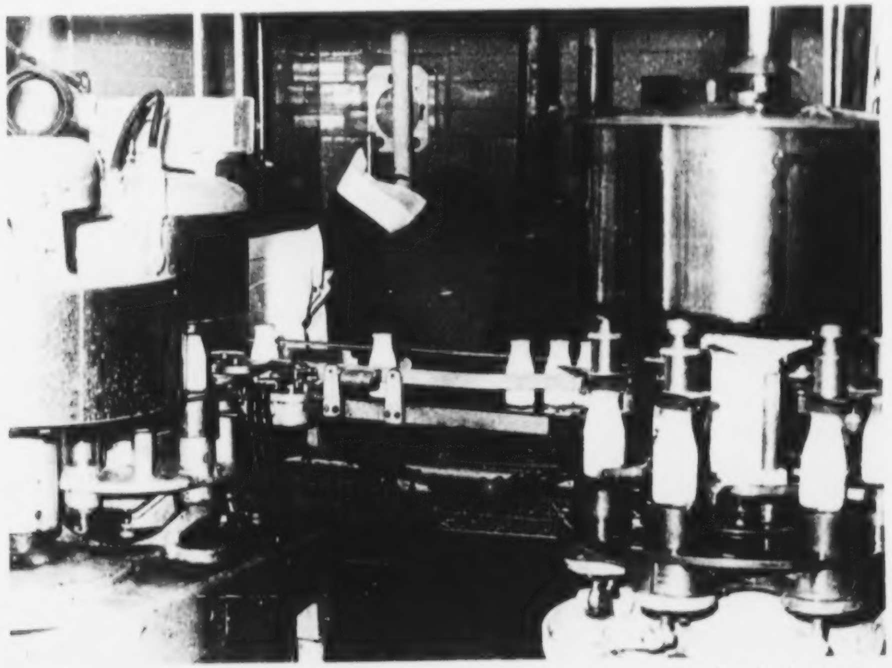
> Modern agricultural research is expensive. It requires large areas of land for field trials and demonstration projects, state-of-the-art equipment for sophisticated laboratory studies, modern facilities for controlled experiments, extensive libraries for background research, and, above all, highly trained scientists and technicians to use these resources for the benefit of humankind. To be effective, agricultural research requires a "critical mass" of all of these elements—and that requires a substantial and sustained investment of public funds.[70]

Since fewer than half of the 1890 institutions receive limited state support for research as compared with white land-grant universities which receive more than 50 percent, they cannot do the same quality and quantity of research as their 1862 counterparts. Although there has been a tremendous increase in federal appropriations during the last two decades, state support for research at 1890 institutions has lagged behind. For example, in fiscal year 1990, the University of Florida received more than $90 million in state support for agricultural research and extension, while FAMU received only $170,000 in state appropriations for the same purpose. Florida A&M University's research program was kept viable through CSRS appropriations of $990,000. Alabama A&M University received $200,000 in state appropriations and $1,400,000 from CSRS: Delaware State College received $50,000 in state appropriations and $470,000 from CSRS; and Langston University received $194,000 in state appropriations and $1,100,000 from CSRS. Southern University, under an expired court consent decree received approximately $500,000 from the state of Louisiana and $1,016.000 from CSRS. Even with the paltry support of 1890 institutions by the several states, they have demonstrated their ability to do quality research in a variety of areas which have local, regional, national and even international significance. With increased support from the federal government and with increased allocations from the several states, 1890 institutions will make even greater contributions to their communities, states, the nation, and the world in the years ahead.

The federal formula funds, or Evans-Allen funds have enabled the 1890 institutions to develop a sound research base as shown by some of the research projects in previous pages. Also, with the passage of Public Law 97-98, Section 1433, a significant beginning has been made in improving the research capabilities of 1890 institutions. This amendment authorized $50 million over a five year period to upgrade agricultural research facilities and equipment at these historically black institutions. The funds were to be made in increments of $10 million, with the first coming in 1983. These funds have been used to purchase land and equipment and to renovate and construct research facilities. With research facilities and formula funds, the quality and quantity of research at 1890 institutions should be increasingly strengthened.

An overview of the Exhibit Room taken at the Bicentennial Symposium by the historically black land-grant institutions in 1976 at the Sheraton Park Hotel in Washington, D.C.

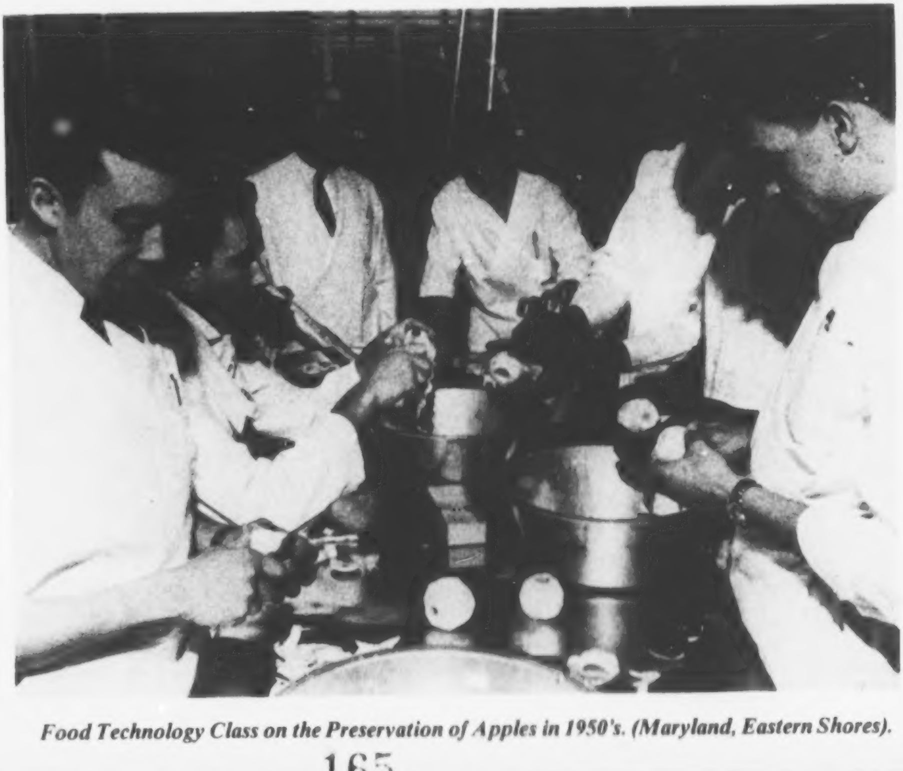
Horticulture specialist from Lincoln University visiting participants in Urban Gardening in St. Louis, Missouri.



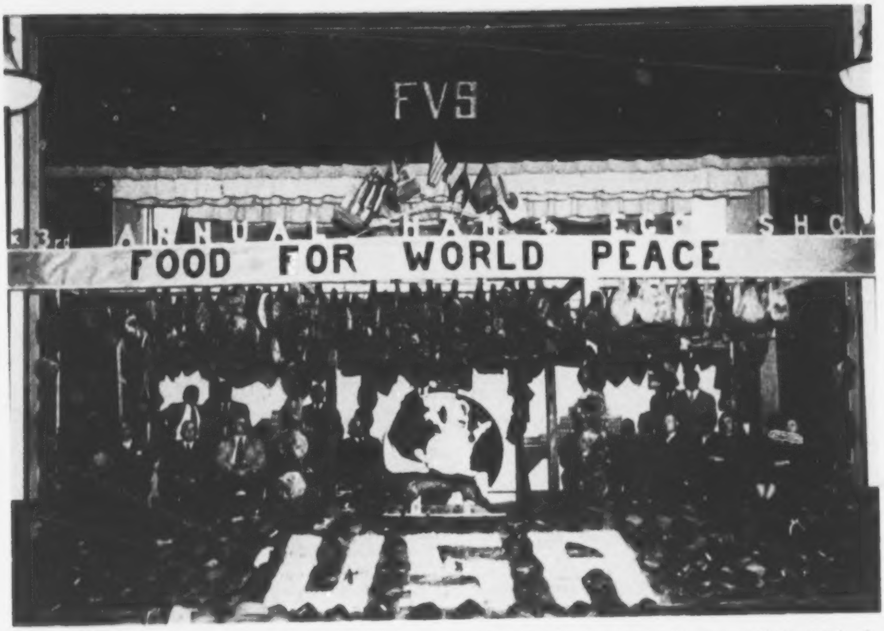
Dairy processing plant at Florida A&M University was one of the most modern in the state in 1956. It was discontinued in 1976 as efforts were made to abolish agricultural programs at the University.

Exhibit by FAMU of CSRS Research at the Bicentennial Research Symposium by historically black land-grant institutions in 1976 at the Sheraton Park Hotel, Washington, D.C.

A backward look at the old dairy at the University of Maryland, Eastern Shores, 1950.



Food Technology Class on the Preservation of Apples in 1950's. (Maryland, Eastern Shores).

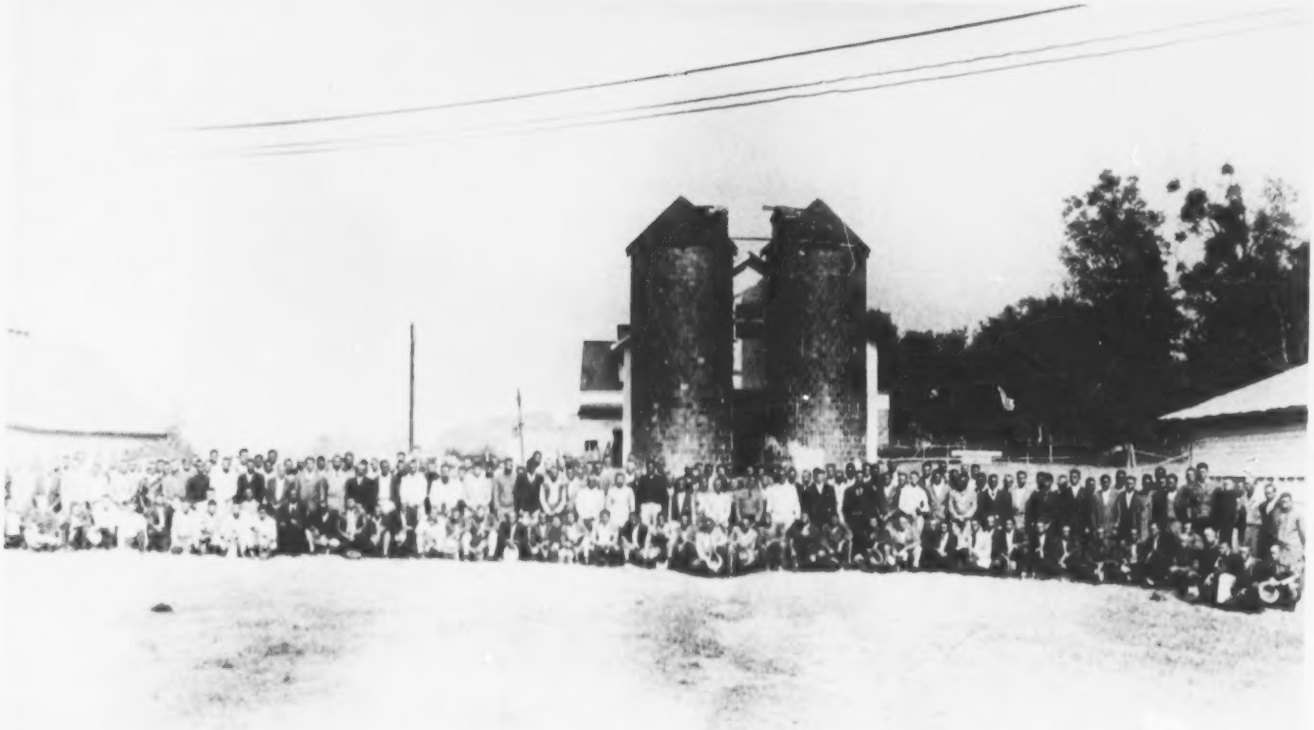

FVS
33rd ANNUAL HAM & EGG SHOW
FOOD FOR WORLD PEACE
USA

Flanked by state and local officials and surrounded by hundreds of cured hams, Otis S. O'Neal addresses the audience at the Thirty-third Annual Ham and Egg Show in 1949 at Fort Valley State College.

An Adult Education class in Clothing and Textiles (Sewing) in the 1940s at the University of Marland, Eastern Shores.

Richard Williams, Animal Scientist at Alcorn State University talking to visiting Honduran farmers about using rye grass as a supplement to the diet of hogs.

Graduate student at Alcorn State University tallying feeder pigs to be sold at state auction.



Old dairy barn at Florida A&M University provided the setting for about 200 high school students and their counselors at a New Farmers of America meeting in 1949.

The George Washington Carver Complex which houses Agriculture and Home Economics programs at Alabama A&M University.

CHAPTER SEVEN

Cooperative Extension Service In 1890 Institutions

ALTHOUGH there is considerable evidence of cooperative agricultural demonstration work and outreach services to farmers and rural people before the turn of the twentieth century, most historians generally regard Seaman A. Knapp as the "father" of Extension Service. When the boll weevil from Mexico threatened to wipe out the cotton crops in Texas in the 1890's, the U. S. Department of Agriculture sought the services of seventy-five-year-old Knapp, who had wide experience as a farmer, professor of agriculture and president of Iowa Agriculture College, to encourage farmers to change their practices and seek new methods of cotton growing. He believed that farmers could be convinced of the necessity for change if demonstrations carried on by farmers themselves were made available on their own farms under ordinary conditions. As Knapp put it: "What a man hears, he may doubt; what he sees, he may possibly doubt; but what he does; he cannot doubt."[1] So Knapp applied these observations to his new job as "Special Agent for the Promotion of Agriculture in the South."

With funds from the federal government and the General Education Board as well as other private funds, Knapp employed field agents and set up farmer-operated demonstration farms. The Farmers Cooperative Demonstration work led to the employment of the first county agent for a single county. The first county agent was W. C. Stallings, who was appointed in Smith County, Texas on November 12, 1906. Thus, the term "county agent" came into usage and the number of such positions increased rapidly during the next few years, giving credence to the value of extension service to farmers.

Coincidentally the same day that Stallings was appointed county agent in Texas, Thomas M. Campbell (or T. M., as he was popularly known) was employed at Tuskegee University as the first extension agent employed by a "Cooperative Extension Program" in the United States. Further, Campbell was the first black extension agent employed in the nation.[2] His employment came after Seaman A. Knapp, founder and director of the Farm Demonstration Work Program, visited Tuskegee in 1906 and talked with Dr. George Washington Carver and his staff about beginning a cooperative program for black farmers in the South. Booker T. Washington took advantage of Knapp's visit and agreed to use General Education Board and Slater Funds to share the expenses for employing a man to operate the Jesup Wagon and conduct demonstration work in Macon and surrounding counties.[3] T. M. Campbell, one of the most promising students at Tuskegee, began his years of pioneering service at the institution on November 12, 1906. About a month later, John B. Pierce was offered and accepted a similar position for the Upper South with headquarters at Hampton University. So Campbell was not only the first black agent but also the first college-based agent in the South. The employment of Campbell and Pierce marked the start of USDA's Negro extension work.

Knapp was at first hesitant about the appointment of black farm agents and favored a segregation relationship. As Schor saw it: "He wanted the agents of Tuskegee and Hampton to be more an extension of themselves than of the Department of Agriculture. In Knapp's view, this was not to be a government project."[4] Yet the quality of work by these two black agents, though different in focus, left a lasting impact upon cooperative extension service. In Crosby's study of the black county agent system, he concluded: "Washington must have been particularly gratified by Knapp's suggestion that farm demonstration work among blacks be considered...as an integral part of Tuskegee's program rather than something inaugurated by the Agricultural Department. Suspicious whites were less likely to oppose a program viewed as a part of Tuskegee than a federal program for black farmers employing black agents"[5]

Although Campbell and Pierce began their extension work within a couple of months of each other, Campbell and Tuskegee rather than Pierce and Hampton became the focal points of black agricultural extension work. This can be attributed to the fact that the more highly educated and aloof Pierce at Hampton concentrated on expanding the program in Virginia and only gradually into North Carolina. Tuskegee and Campbell were more people-oriented and willing to expand the work rapidly beyond Alabama throughout the Gulf States. Furthermore, Booker T. Washington's Tuskegee responded with a barrage of requests and various pressures designed to secure more agents and more money for the program. Consequently, Knapp possessed greater confidence in Campbell than in Pierce.[6]

Washington built Tuskegee on a philosophical foundation designed to take education in the practical industries to people in surrounding areas. One example of his early outreach efforts can be seen in the First Tuskegee Negro Conference on February 23, 1892, which drew over 400 men and women to the campus. Participants were encouraged to discuss their problems which included the crop-lien burdens, one-room cabins, education of children, moral and religious needs. By the turn of the century, more than 2,000 persons from all over the South were in attendance at these conferences or various institutes sponsored by Tuskegee. These conferences or institutes were replicated throughout the South and associated with them were local and county fairs, short courses in agriculture, lectures, demonstrations, and lessons in practical skills.

Dr. George Washington Carver was a major driving force in carrying agricultural information to the people. It was Carver who presented a sketch of a wagon to be used as a teaching aid; Washington took the sketch to Morris K. Jesup of New York, Treasurer of the Slater Fund and a member of John D. Rockefeller's General Education Board. With funds for purchase and operation, a Jesup wagon was purchased more than six months before T. M. Campbell became an extension agent. On May 24, 1906, under the direction of George R. Bridgeforth of Tuskegee's Agricultural Department, the "Jesup Agricultural Wagon" rolled out of Tuskegee on its mission of service. A description of the service provided by the Jesup Wagon, the "movable school" or "traveling school" as it was called can be seen in the following statement:

> Equipped with farm tools, a variety of seeds, samples of fertilizer, a butter churn and cream separator, a milk tester, and other equipment for demonstration purposes, this elaboration of Carver's practice brought its lessons home to an average of two thousand people a month throughout Macon and adjoining counties.[7]

Further, Bridgeforth and other wagon operators emphasized "crop rotation, fertilizers, growing one's own food supply, poultry and livestock production, and better ways to cook and eat." Charts, sample products, specimens of purebred livestock, and in-field demonstrations of improved plows and cultivators lent powerful support to these lessons.[8]

Fourteen years before the first Jesup Wagon rolled out of Tuskegee, the Farmers' Conference idea had caught hold and farmers were learning how to grow crops and livestock at small cost and large profit. The idea of holding such conferences did not originate with Washington but with Major Richard R. Wright, the first principal of the Georgia State Industrial College for Colored Youths, who sponsored and reported on similar conferences during the early 1880's. Washington, however, made them famous. Indeed, it is from the meeting of the "first" conference in February 1892 that many date the beginning of black agricultural extension work.[9]

Farmers' Conferences spread throughout the 1890 institutions and became an official part of the agricultural curriculum. The specific reasons for such conferences were as follows: "(1) They provide a free, short course in some practical agricultural subject for the direct benefit of the practical farmers; (2) They allow free discussion of methods as to the working out of various farm problems; and (3) They give teachers and students a chance to become better acquainted with the needs of farmers and further assist them in obtaining information which will aid them and their families in improving rural life."[10] Since these conferences were generally one day in length, they did not give the participants the in-depth experiences that they needed.

The success of Farmers' Conferences led to the first Agricultural Farmers' Institute which was organized at Tuskegee on November 11, 1897, the same year the Tuskegee State Experiment Station was established. The idea of Farmers' Institutes gained strength in the South after

1900, and spread to other black institutions in Texas, Mississippi, Florida, North Carolina, Georgia, South Carolina, and Louisiana. Out of the Farmers' Institutes grew community and county fairs. Subsequently, these countywide fairs would have "Negro Day" or "Colored People" day during which blacks would demonstrate some of their success as farmers.

Another outreach service was the "Short Course in Agriculture" which lasted from two to six weeks—most frequently two weeks. Beginning at Tuskegee in 1904, the "Short Course" idea caught on in every one of the 1890 institutions. Short courses, which were generally free, gave farmers insight into such things as general farming, truck gardening, fruit growing, and livestock, dairy, and poultry production. The courses were extremely practical, giving both the educated and uneducated opportunities to profit by the courses. While it is almost impossible to establish a definitive chronology on the various conferences and institutes, the Mid-Winter Institute was initiated in Florida in 1910 and became one of the most popular and beneficial aids for farmers. At the initial Mid-Winter Institute demonstration agents and lecturers were featured in discussions of cotton culture, corn culture, and crop cultivation.[11] The notion of taking the training opportunities to the people was an early practice with Tuskegee and the 1890 institutions.

The third major component of the land-grant triad—teaching, research, and service—was the Smith-Lever Act of 1914 which Secretary of Agriculture David F. Houston regarded as "one of the most striking educational measures ever adopted by any Government."[12] According to Rasmussen: "As he saw it, nothing short of a comprehensive attempt to make rural life profitable, comfortable, and attractive would solve the problems of agricultural and rural life."[13] This Act would be the medium through which the intellectual and social sides of rural life could be improved. Although blacks did not profit by the Act as extensively as did their white counterparts, it did encourage greater outreach services to both races.

The purpose of the Act as stated by Congress was: "To aid in diffusing among the people of the United States useful and practical information on subjects relating to agriculture and home economics and to encourage the application of the same."[14] To make certain that funds were used for outreach purposes, the Act further stipulated that agricultural extension work was to "consist of the giving of instruction and practical demonstrations in agriculture and home economics to persons not attending or residents in said colleges in the several communities, and imparting to such persons information on said subjects through field demonstrations, publications, and otherwise."[15]

Beginning with an initial fund of $600,000, each state was to receive $10,000 in federal funds annually. Of course, the amount increased tremendously in subsequent years. Federal funds were available in amounts not to exceed 50 percent of the cost of extension and the additional amount was to be provided by the state, county, local authority, and individual contributions from within the state. Since a separate-but-equal racial philosophy determined the allocation of funds where separate black and white land-grant institutions were involved, such an arrangement virtually assured that blacks would not receive their fair share. The Act really stated that: "In any state in which two or more such colleges have been or hereafter may be established the appropriations hereinafter made to such states shall be administered by such college or colleges as the legislature of such state may direct."

In Senate debate on the Smith-Lever Act, efforts were made by Senator Wesley Jones of Washington to amend it to give a definite share to blacks because experience had shown in previous land-grant legislation that without such an amendment, there would be marked neglect of the rural black population. Senator Hoke Smith of Georgia, one of the sponsors of the Act, stated forcefully how he would use the funds despite the fact that appropriations were based upon the rural population of both the white and black races. Smith declared, "We will put it in our white college. We would not appropriate a dollar in Georgia to undertake to do extension work from the Negro agricultural and mechanical college...where a board of trustees would control it, and we could not handle it effectively."[16] The Southern argument against the Jones Amendment maintained that white agents already carried on work which benefitted black farmers, questioned the capability of black land-grant colleges to carry out effective extension work, and suggested that a division of responsibility for extension work within a state might result in dissimilar instruction and racial conflict over the program.[17]

While it is a matter of record that Congress refused to incorporate explicit safeguards into the Smith-Lever Act and that black land-grant colleges did not share equitably in extension funds, subsequent legislation attempted to correct some of the inequities. Also, since the conduct of extension work in the state must be in accordance with procedures agreed upon by the Secretary of Agriculture and the state agricultural institution, there was a high degree of federal control over the administration of the Cooperative Extension as dictated by the benevolent behavior of federal officers and 1862 institutions. This arrangement lasted until it was found unconstitutional in the 1960's.

Briefly, the nature of the Cooperative Extension Service as conceived by the Smith-Lever Act was as follows. The three distinct types of extension activities were farm demonstration, home demonstration, and boys' and girls' club work. Farm demonstration work was to be conducted by agricultural advisors generally called "county agents." Usually assigned a county, he was to visit farms, make a direct study of their problems, plan remedial procedures, call upon specialists for aid when necessary, arrange and conduct farmers' institutes, distribute literature, and utilize local media for disseminating information. Further, the county agents were to plan and execute countywide extension programs, arrange local demonstration projects (gardening, animal husbandry, soil conservation, etc.), select and train local leaders to cooperate with the program, and interpret and participate in administering the various agricultural programs conducted by agencies of the federal government.

The home demonstration agent was to conduct extension work in home economics. Like the county agent, the home demonstration agent was primarily a field worker who was to deal with individual rural families and with groups of homemakers and organized clubs. The undergirding aim was to improve home practices in child care and training, sanitation, food selection and preparation, improve family relationships, home nursing, home beautification, clothing, and other aspects of rural living.

The "4-H Club" work focuses on boys and girls between 10 and 20, seeking to develop in young men and women the ideals, abilities, and understanding essential for effective farming, homemaking, citizenship, leadership, and a sense of responsibility for their growth and development. Since such a large portion of the black population in the South was poor and underprivileged, the extension program was needed especially in each of the seventeen states where dual land-grant institutions were operated.

In 1930, the seventeen Southern states had 6,500,000 rural blacks who constituted 24.2 percent of their aggregate rural population and 96 percent of all rural blacks in the United States.[18] Since these seventeen states include within their borders all but four percent of blacks who were potential clients of the Cooperative Extension Service, and since rural population determined allocation of funds, 1890 institutions should have received at least 24.2 percent of funds under the Smith-Lever Act. Unfortunately, blacks did not share according to their population.

In February 1938, there were 4,852 extension workers employed in 1,498 counties in the seventeen Southern states mentioned above. The five classifications were: Directors and assistant directors, 30; Extension agents, 3,734; State committeemen in cotton adjustment, 10: Assistants in cotton adjustment, 603; and other specialists, 475.[19] Since practically all blacks fell in the "extension agent" category, attention will be focused on this group.

Chapman observed: "Of the 3,734 extension agents employed in all seventeen Southern states, some 448 were Negroes. Thus representing 24.2 percent of the rural population, blacks constitute only 12.0 percent of the extension agents or approximately one-half of their "proportionate share."[20] In Oklahoma, where the black population was small, the number of extension workers exceeded the corresponding rural population ratio; in Texas, blacks had 89.0 percent of what they deserved; and in the other states, blacks had 50 percent or less than the number to which they were entitled.[21]

Even though extension work programs of both 1862 and 1890 institutions usually developed along parallel lines of service to their constituents, there existed a significant difference in emphasis. White programs concentrated on cash crops and commercial farming, while black extension continued to stress self-reliance and subsistence farming through various "live-at-home" campaigns. Thus, improvement of diet and general living conditions received extensive treatment. Black agents spent considerable time on relatively simple projects designed to improve sanitation such as door and window screening, the development of safe water supplies, improved drainage systems, year-round gardening to feed family and livestock, and other steps toward self-sufficiency. Also, lessons were given in consumer economics, the preservation of food, and ways to avoid exorbitant food prices at the country store.[22]

Crosby found that land ownership was the obvious first step toward self-sufficiency. One of the familiar slogans was: "Ten acres clear of debt are better than a hundred with an overdue mortgage."[23] However, roughly 75 percent of black farmers in the late 1920's were tenant farmers. So black agents frequently had to get the landlord's consent and financial support before they could help implement improvements. Given the magnitude of the problem facing black farmers, black county agents were never sufficiently numerous to serve the needs of the majority of black farmers. The distribution of black agents and the families they served in 1941 are shown on the following pages.

Tables 2 and 3 will show that there was an inadequate number of black extension agents to meet the tremendous needs of black farmers. The same pattern existed for both large and small counties, and for county agent work and home demonstration work. There was almost a complete absence of agents for club work. Yet blacks, with a high rate of illiteracy, tenancy and poverty, needed the guidance and assistance of agents more than any other group.

Despite the inequities, records will show that blacks were able to make substantial progress in the Cooperative Extension field and some of the outstanding leaders left large footprints upon the sands of extension history. The few examples cited here will give an idea of the quality of work that black leaders were doing with inadequate financial and human resources. Most of the leading black state agents were placed on 1890 institution campuses because legal racial segregation would not allow them to mix with their white counterparts. One such person was T. J. Jordan, who was hired as the first black extension agent in Louisiana in 1914. At the time of his employment, there were 46 white county agents, eight home demonstration agents, five supervisors and one administrator, all at Louisiana State University (LSU). Although Jordan was hired and paid by LSU, he was stationed at Southern University.[24] This pattern was maintained over the years.

TABLE 1. DISTRIBUTION OF NEGRO EXTENSION AGENTS AS OF 1 JANUARY 1941

State	Total Negro Agents	Supervisors (State Agts., Dist. Agts., Movable School Leaders, etc.)	County Workers			Counties with Negro Agents	Counties with Both Co. and Home Dem. Agts.	Counties with Only One Agent		
			County Agent Work	Home Dem. Work	Club Work			County Agent Work	Home Dem. Work	Club Work
Alabama	73	8	35	30	—	40	37	2	1	—
Arkansas	29	4	11	14	—	16	10	1	5	—
Florida	19	2	9	8	—	14	4	6	4	—
Georgia	50	4	22	—	50	15	25	10	—	
Kentucky	7	1	4	2	—	8	1	5	2	—
Louisiana	20	1	12	7	—	26	2	16	8	—
Maryland	5	—	2	8	—	6	4	2	—	—
Mississippi	77	4	33	40	—	49	24	9	16	—
N. Carolina	56	5	33	18	—	33	18	15	—	—
Oklahoma	20	2	9	9	—	9	9	—	—	—
S. Carolina	37	2	19	16	—	25	10	9	6	—
Tennessee	21	3	10	8	—	23	7	4	12	—
Texas	87	5	46	36	—	51	31	15	5	—
Virginia	35	3	25	7	—	35	1	28	6	—
W. Virginia*	5	1	1	1	2	5	—	—	1	2
Total	541	45	271	223	2	390	173	137	76	2

SOURCE: Adapted from Doxey A Wilkerson, *Agricultural Extension Services Among Negroes in the South: Report Prepared for the Conference of Negro Land Grant College Presidents; Including Also: Extension Work with Negroes: Statement Issued by U.S. Secretary of Agriculture, February, 1941* (n.p.: Conference of Presidents of Negra Land Grant Coleges, 1942), 58.

*West Virginia also had one County Agricultural Agent at Large, and one Club Agent at large.

TABLE 2. NEGRO EXTENSION AGENTS IN COUNTIES WITH COLORED FARM FAMILIES

(Personnel Figures as of 1 January 1941)

			Counties with Negro Extension Agents by Density of Colored Farm Families							
			Over 1,000		500 to 1,000		100 to 500		Less than 100	
State	Colored Farm FAmilies in State*	Counties in State	Number Number Counties	Number with Negro Agents	Number Number Counties	Number with Negro Agents	Number Counties	with Negro Agents	Number Counties	with Negro Agents
Alabama	94,265	67	33	31	12	5	15	4	7	—
Arkansas	70,602	75	24	16	8	—	8	—	35	—
Florida	14,132	67	4	4	4	4	22	6	37	—
Georgia	87,832	159	27	17	47	18	61	15	24	1
Kentucky	9,368	120	—	—	1	1	32	6	87	—
Louisiana	72,023	64	27	21	11	4	19	—	7	—
Maryland	8,098	24	—	—	7	5	12	1	5	—
Mississippi	166,498	82	53	35	12	6	13	3	4	1
N. Carolina	75,816	100	31	21	20	9	34	3	15	—
Oklahoma	18,769	77	4	4	6	4	35	—	32	—
S. Carolina	83,740	46	38	23	7	2	1	—	—	—
Tennessee	35,260	95	9	7	10	3	23	4	53	9
Texas	78,532	254	30	24	29	20	29	7	166	—
Virginia	48,979	100	11	10	29	19	33	6	27	—
W. Virginia†	868	55	—	—	—	—	1	—	54	5
Total	865,404	1,385	291	213	203	100	338	55	553	16

SOURCE: Adapted from Doxey A. Wilkerson, *Agricultural Extension Services among Negroes in the South: Report Prepared for the Conference of Negro Land Grant College Presidents; Including Also Extension Work with Nogroes: Statement Issued by U.S. Secretary of Agriculture, February, 1941* (n.p.: Conference of Presidents of Negro Land Grant Colleges, 1942), 59.

*Population figures from 1935 census. In the census reports "Colored" includes Negroes, Indians, Chinese, Japenese and all other nonwhite races.

†West Virginia also had one County agent, and one Club Agent at large.

Agricultural extension, without direct state support, had reached a well-developed watershed at Southern University by 1948. Two of the four state agents were housed at Southern University—a state agriculture agent and a state home demonstration agent. They assisted 39 black parish (county) agents in planning and executing their local parish programs, primarily through meetings of farm youths and adults. The former were organized into 4-H Clubs while adult work was organized into Self-Help Leagues and Home Demonstration Clubs. In 1946, the General Education Board had given $11,000 through Southern to conduct a nutrition project in Ascension Parish. During the late 1940's, the University instituted four-year non-degree trade courses in agriculture, home economics, and mechanical arts.[25]

Community outreach programs were priorities for Dr. Felton G. Clark, the president of Southern. Mrs. Amelia J. Lewis, the Assistant State Home Demonstration Agent for Work with Negroes, had office space on the campus and facilitated the University's involvement in extension work. 4-H Club short courses and judging contests were held at various times on the campus. As late as 1963 there were over 4,000 active paid members, and approximately 5,700 day school students enrolled in vocational agricultural classes throughout the state. Short courses for 4-H members were held in home beautification, beef cattle, dairy cattle, gardening, poultry, swine, and tractor driving.[26]

In Florida, A. A. Turner, a graduate of Wilberforce University who also completed the dairying program at Ohio State University, was primarily responsible for the development of the Department for Negro Work under the Florida Cooperative Extension Service. Although headquartered at Florida A&M University, Turner was under the direct supervision of the Extension Division of the University of Florida and weekly reports were made to the state agent there. As local district agent, Turner supervised all black farm and home demonstration agents throughout the state and sent tabulated and summarized reports to the white state extension leader's office in Gainesville.[27]

Turner and his agents encouraged diversification and cooperation among their farm and rural clientele. Marketing clubs, which began in 1922, were expanded into such groups as the Negro Farmers' Union, the Madison County Farmers' Association, Suwannee County Farmers'

Cooperative Association, Leon County Farmers' Association and the like. Although successful cooperative marketing required the collective finances and action of farmers, the county agents supplied farmers with the facts regarding productive farming practices and better methods of picking, grading, and packing. County agents also directed the farmers to a supply of pertinent marketing and government program information needed to realize a mutual profit.[28] Instead of working individually, farmers came together and shipped carloads of watermelons and other produce to large urban markets.

Perhaps Turner's most outstanding contribution can be seen in his influence in growing and marketing sugarcane and potatoes. From the sugarcane, black farmers began producing Flocane Sugarcane Syrup which was marketed as Flocane Syrup in such cities as Chicago, Cleveland, Detroit, and New York. Also, the Florico Yam, a copper-skinned sweet potato, found its way by the carload to large cities.[29] Although subordinated to extension supervisors at the University of Florida, black state agents like A. A. Turner, J. A. Gresham, and V. L. Elkins were able to direct black county agents in improving the quality of life for thousands of black farmers and indigent rural families.

One of the outstanding achievements in agricultural extension service was the Fort Valley "Ham and Egg Show" which was initiated at Fort Valley State College in 1916 by Otis Samuel O'Neal, a black county agent working with black farmers under the sponsorship of the Agricultural Extension Service. His work with black farmers in middle Georgia is without question one of the most dramatic chapters in the history of the Cooperative Extension Service.

Extension work for blacks in Georgia began in 1908 with the appointment of P. D. Johnson as the black county agent in Newton County. The first state agent for black workers, E. A. Williams, was appointed on September 14, 1914 with headquarters at Georgia State College in Savannah. After several other appointments, O'Neal was named county agent for Houston County (later divided to form Houston and Peach Counties). A graduate of Fort Valley Normal and Industrial School in 1902 and the normal course in agriculture at Tuskegee Institute in 1913, O'Neal earned the B.S. degree from Tuskegee in 1938. He was profoundly influenced by Thomas Monroe Campbell, the first black agricultural extension agent in the United States. He received his idea for the Ham and Egg Show in 1915 while traveling through his counties and discovering that many black farmers had scarcely enough cured meat to last through March. Specifically, he noticed one farmer with 14 children who had one ham hanging in a hay wire in his corn crib. When O'Neal asked him where he was going to get meat to feed his family, the man said: "I reckon I'm going to buy it." "With what?" O'Neal thought. Thus, the idea for the Ham and Egg Show was born.[30]

At the first Ham and Egg Show, held on February 2, 1916 "there were on display 27 poorly trimmed, ragged hams, shoulders, and sides, and 17 dozen dirty mixed eggs...and eighty-nine farmers, farm wives, and visitors present."[31] However, with such advertisement captions as: "The Farmers of Houston and adjoining Counties Will Show That They Are Prepared to Fight the Boll Weevil By Putting on Exhibition 1,000 Hams," by 1918, but his idea began to be exported to other counties and states in the South.

O'Neal's hams have been displayed at local and county fairs, state fairs, college chapels, and even the Exposition of 75 years of Negro Progress held at the Chicago Coliseum in 1940. By 1943, more than 50,000 people had come to the Fort Valley Show and it had become a teaching center, not only for local farmers, but also for agricultural officials throughout the state and the South. O'Neal was a creative and multi-talented teacher. For example, in 1943, he presented a pageant entitled "The Hog, Hen and Mule Speak." Through this rural comedy which elicited roars of laughter, serious lessons were taught not only on effective farming but on health subjects like nutrition, syphilis, tuberculosis, hookworms, and homemaking topics. During the celebration which usually lasted for a week, black farmers also listened "eagerly to Extension specialists tell them how to improve their yields in the coming year, how to conserve their soil, how to face problems of labor scarcity, (and) how to use new machinery and new methods."[32] The list of notables attending his shows included such outstanding leaders as George Washington Carver, President J.R.E. Lee of Florida A&M University, C. C. Spaulding, president of the North Carolina Mutual Insurance, representatives from the United States Department of Agriculture, W. T. Anderson, Editor of the Macon Telegraph, and many others.

O'Neal's show attracted whites and blacks alike, from the largest landowner to the smallest sharecropper and tenant. He had the assistance of Margaret L. Toomer, a home demonstration agent. The two organized 4-H and home demonstration clubs in every rural community in their counties. They also organized the Agricultural Council of Farmers and Farm Wives that met frequently to plan for agricultural improvement. Bond summed up O'Neal's accomplishment in the following manner: "What O'Neal has done, he has done because he was intelligent, imaginative, and industrious; because it was his job to teach the people to live better lives, and because, as a county agent among Negroes for the Agricultural Extension Service, he loved his job and the people whose lives were his job."[33] So popular did the "Ham and Egg Show" become that O'Neal was written up in *Pathfinder, Reader's Digest, Coronet,* and *Progressive*, and *Life* magazine (March 22, 1943) carried two pages of pictures and a cover story on this phase of agriculture at FVSC. The program was continued under Extension Agent Robert T. Church until the late 1960's when desegregation tended to deemphasize such activities which emanated from the black community.

Many other important success stories in agricultural extension could be cited if space would permit. In fact, the extension service is perhaps the most widely researched of the three land-grant functions. In his studies of black county agents Earl Crosby points to their success in helping black farmers establish credit unions and cooperative marketing associations, and secure loans and other benefits from various federal agencies. For example, in 1923, "the 103 black cooperative marketing associations formed with the aid of county agents reported sales of $124,978.00 with profits of $35,000."[34] Whatever success black farmers experienced, except in very limited instances, the "proper distance between black and white farmers" had to be maintained. Black agents were limited to serving black people.

One of the more detailed unpublished studies focusing on agricultural extension was done by Dr. Joel Schor, Dr. Ocleris Simpson, and Dr. Benjamin D. Mayberry, entitled, "A Century of Agriculture in the 1890 Land-Grant Colleges and Universities, 1890–1990: A Stampede for Equality."[35] This work analyzes the various extension programs in the various states and chronicles the uneven development in the several states throughout the period.

During the desegregation/integration struggle of the 1950's and 1960's, extension programs which had previously operated from black campuses were transferred, in most cases, to 1862 institutions. For example, all of the personnel in extension at Fort Valley State College were transferred to the University of Georgia in Athens. Black professionals who had been respected leaders at their universities and in nearby farm communities found themselves in completely subordinated and sometimes invisible positions. When the land-grant functions were transferred from Savannah State College to FVSC in 1949, the headquarters for black extension service remained in Savannah. After the passage of the Civil Rights Act of 1964, the black state staff was also moved to FVSC. However, after just one year at FVSC, the black extension staff was moved to the University of Georgia on July 1, 1965. John Demons, who served as an Area Supervisor prior to the move to the University of Georgia, was promptly demoted to the title of Rural Area Development Agent. In fact, Demons recalls that the six blacks had no job at the University of Georgia except "filing number 2 pencils and gem clips." Their training and experience were not utilized in integrated settings. In such a work environment Demons said: "I felt like a bastard at a family reunion."[36] The Council of 1890 Presidents/Chancellors jointly expressed dissatisfaction with extension work which was conducted under a variety of organizational arrangements and brought varying degrees of effectiveness, efficiency, and practical results to blacks, limited-resource farmers and rural people. Thus the Council lobbied and used all of the pressure at its disposal in an effort to get from under the direct control of 1862 universities.

By October 4, 1971, the extension program was reestablished at 1890 institutions and Tuskegee University with federal support under Section (d) of the Smith-Lever Act of 1914. For the fiscal year 1972, the sum of $4 million was earmarked for extension work at 1890 institutions, of which $2 million was placed in reserve pending determination of the availability of qualified personnel.[37] Because of the language of the Act, all 1890 institutions and Tuskegee University were still forced to implement Cooperative Extension Programs under the auspices of 1862

State Extension Directors. Consequently, there emerged "as many different administrative and organizational arrangements as there are Southern states."[38]

While all 1890 and 1862 universities had various types of cooperative agreements, the case of Florida will show how one institution handled the problem. Florida A&M University (FAMU) and the University of Florida (UF) agreed through a Memorandum of Agreement dated January 20,1982 to designate a Director to develop a cooperative extension program since the new law required joint program planning and coordination of agricultural research and extension programs between the 1862 and 1890 institutions in all states which have both predominantly white and predominantly black institutions. The comprehensive plans had to be approved or rejected by the Secretary of Agriculture, USDA.

In 1977, FAMU and UF had created the Agricultural Research Extension Center (AREC) on the FAMU campus with former President Benjamin L. Perry, Jr. as its director. The AREC aim was to provide a mechanism to coordinate both the agricultural research and extension programs of the two universities. With the retirement of Perry in 1980, AREC was replaced with the Center for Cooperative Agricultural Programs (CCAP) under Dr. Robert Bradford, located on the FAMU campus and agreed to by President Walter L. Smith of FAMU and President Robert O. Marston of UF. As with AREC, the CCAP Director had the responsibility of developing and coordinating a joint Institute of Food, Agriculture and Science (IFAS) and FAMU agricultural sciences research and extension programs. While the CCAP appears to represent both institutions, FAMU is definitely a minor partner in the venture. The FAMU phase of the program has been under the supervision of Dr. Charles Kidd, the Dean of the College of Engineering Science, Technology, and Agriculture, since 1977.

The passage of Public Law 95-113 on September 29, 1977, had positive and salutary implications for 1890 institutions and Tuskegee University. Popularly known as the Food and Agricultural Act, Section 1444 made the administrators of 1890 extension programs and the administrator of the extension program at Tuskegee University coequals with no one having veto power. This legislation was indeed significant: for the first time in history, the federal government provided formula funding for extension support directly to the historically black land-grant institutions. In addition, the funding itself was most positive in that it was appropriated annually, thus becoming perpetual as did the Morrill Act, Hatch Act, Smith-Lever Act and others. The formula began at 4% and was raised to 6% of the total amount appropriated to the Extension Services of the Department of Agriculture. The funds appropriated for extension work in black institutions are shown below:

Table 2. Summary of Federal Formula Funds for Extension
1972 through 1990

FY	Purpose	Extension
1972	Programs	$4,000,000
1973	Programs	6,000,000
1974	Programs	6,000,000
1975	Programs	6,450,000
1976	Programs*	7,823,000
Interim	Programs	195,572
1977	Programs	8,400,000
1978	Programs	8,833,000
1979	Programs	10,115,000
1980	Programs	10,453,000
1981	Programs	11,250,000
1982	Programs	12,241,000
1983	Programs	16,241,000
1984	Programs	17,241,000
1984	Facilities**	0-
1985	Programs	17,741,000
1986	Programs	16,877,000
1986	Facilities**	50,000,000
1987	Programs	16,877,000
1988	Programs	18,291,000
1989	Programs	18,300,000
1990	Programs***	24,000,000

The Fort Valley State College's Cooperative Extension Program seeks to identlfy and develop educational programs for a diverse clientele which includes the rural disadvantaged, working homemakers, small/family and part-time farmers, lay community leaders, youth, small businessmen, and other members of the general public in Georgia. Under the leadership of Dr. Fred Harrison, Jr., Administrator of CEP at FVSC, the program is making its impact in four general areas: Agriculture and Natural Resources, Home Economics, Community Resource Development, and Youth and Manpower Development.

Dr. Harrison emphasized that CEP does not restrict itself to farming practices and innovative marketing approaches for limited-resource farmers, but is concerned with developing, extending, and preserving human capital by offering human related services without regard to race, color, sex, physical handicap, or national origins. To meet some of these needs conferences and seminars have been held with such titles as Women's Health Issues, Rural Doctors and Rural Health, Farm Financial Management, Job Skills, Senior Citizens Extravaganza, Secretarial Development, Consumer Education Day, Family Community Leadership, Effective Gardening, Child Abuse, Youth Development and many more. For example, the 4-H Sprouts Residential Camp at Fort Valley State College provided 3,500 children with good education, recreation, and nutrition at summer enrichment camp from June 5 to August 5, 1988. The work of CEP/FVSC is summed up in an excellent paper EXPN which is circulated free of charge in Middle Georgia. Somewhat reminiscent of the Tuskegee Jesup Wagon, FVSC has an educational mobile unit which takes services to its clientele. It is described in the following manner:

> One of the special features of FVSC is its mobile Educational Delivery Systems for Adult Learners which was initiated in the fall of 1988. Through the medium of a customized 45-foot mobile teaching trailer, college personnel visit small Georgia towns and communities and demonstrate to leaders new educational technology. The three-compartment trailer is financed by the W. K. Kellogg Foundation. Under the direction of FVSC Extension Education Specialist, Mercedes Parker, the program offers awareness in "computer, video equipment, satellite programming, interactive video—

> all of the technology that can bring a community...it's a learning center for community leaders...extension agents, librarians, health officials, vocational teachers, adult tutors, the clergy, and others who provide adults with some form of knowledge, skill, or service."[40]

As at other 1890 institutions, the Cooperative Extension Program (CEP) at Kentucky State University (KSU) is a public service arm that provides assistance to limited-resource farmers, homemakers, families, youth, and communities throughout the state. The CEP is especially active in the northern, central, southern and southwest-central counties of Kentucky. Assistance is provided through CEP's small farm development, urban gardening, Christmas tree production, family development and management, family economics, child development, and aquaculture service programs.

One of the popular extension programs at KSU is Urban Gardening and Home Horticulture. This program began in Louisville in 1976 and was expanded to Bowling Green the same year and to Frankfort in 1984. Through the urban gardening and home horticulture programs, many urban residents have learned to grow fresh vegetables and enjoy the exercise and relaxation that are a part of gardening. Home horticulture still means growing flowers and vegetables, but it also means growing flowers and vegetables in containers and growing vegetables in the middle of the winter by using a cold frame.[41]

The KSU-CEP gardening program reaches almost every group—children, adults, and the handicapped. Special gardening techniques adapted to specific handicaps are utilized. In addition, community gardening sites are quite popular in Frankfort, Bowling Green, and Louisville, where more than 650 participated.

The director, Harold R. Benson, takes pride in the fact that each KSU-CEP program is developed to meet a need expressed by people at the local level. More than one-half million Kentuckians have taken part in KSU-CEP programs.

Using the same pattern as Kentucky State University, the Lincoln University Cooperative Extension Program has had a tremendous impact with its Urban Gardening Program in St. Louis, Missouri. Beginning in 1978, complete horticulture support was provided from the Lincoln University campus. In-service training sessions were held weekly throughout the gardening season, providing information on gardening techniques, production and various gardening problems. Visits were made to demonstration gardens, educational materials were provided and visual aids were used when practicable. In spite of a cool, damp spring in St. Louis, as of September 30, 1978, there were 476 gardens planted, 451 maintained through harvest, with a total estimated product of $52,905. It should be noted that over 98 percent of the produce harvested was for home consumption. Although this successful first year was just a beginning, as the Secretary of Agriculture said in announcing the program: "The program can mean hope to thousands of low-income, city dwellers who have never before had an opportunity to grow their own vegetables."[42] Lincoln University has continued to take this service to people over the last decade.

Virginia State University (VSU) has been committed to extension services to its citizens since 1906 when John Baptist Pierce became the first black extension agent in Virginia. However, only since 1972 and the advent of reasonable federal funding has the University begun to realize its potential in this important area of service. Under the directorships of Ross Newsome, a veteran state agent of extension, Millard Tennyson Carter, and currently Dr. Clinton V. Turner, Extension Administrator and Interim Associate Vice President, School of Agriculture and Applied Sciences, Virginia State's extension programs have dealt with "such issues as agricultural profitability, family financial stability, conservation and management of natural resources, preparing youths for responsibility, developing leaders and renewing volunteerism."[43] In assessing the purpose of CES, Dr. Turner emphasized that the development of alternative enterprises has a high priority for Virginia State's Extension programming. Said Dr. Turner: "As we serve the small limited resource farmer, we must focus on developing programs that will help farmers diversify, thus making agriculture more profitable."[44] It is evident that Dr. Turner is leading a changing and vibrant program.

Virginia State University takes pride in the fact that CES is promoting alternative crop programs to help restore profitability to Virginia agriculture. For example, participation in Virginia's comprehensive Small Farm Program enables University personnel to focus on the needs of limited-resource farmers who are at highest risk. To encourage this group to supplement their incomes by growing alternative crops, demonstration projects have been established on Randolph Farm, the University's 400-acre research farm, to which thousands are invited annually to evaluate the potential of alternative enterprises. VSU holds an annual "Crop Field Day," an activity sponsored by the Cooperative Extension Service and the Department of Agriculture and designed to highlight research and agricultural activities at VSU. In 1989, the Fourth Annual Crop Field Day at Randolph Farm drew over 200 farmers, agricultural specialists and businessmen to the campus. In addition to observing different varieties of corn and soybeans, participants also observed outstanding work in the area of aquaculture. This program gained momentum during the 1988 session of the Virginia General Assembly when the governor presented a budget to include $1 million to assist in implementing the aquacultural initiative.[45]

Among other important alternative programs was the Shiitake Mushroom project which is experiencing exceptional growth in Virginia. The Virginia-grown Shiitake mushroom outsold other Shiitake mushrooms by two to one. Growers are taught to follow recommended cultural and marketing practices to insure a quality product at the retail level. The value of this crop may be seen in the fact that Shiitake mushrooms are sold wholesale for $4.00 to $5.00 per pound. Also VSU, under a grant from the Soil Conservation Service of the United States Department of Agriculture, encourages farmers to adhere to the provisions of the 1985 Food and Security Act or Farm Bill. According to the Act, if farmers fail to develop a conservation plan, they will not be eligible for many USDA program. Strip-cropping is an example of an effective soil conservation practice being demonstrated and encouraged by VSU soil technicians and scientists.

The CES believes also in supporting rural youth through innovative 4-H programs. During 1988, VSU's 4-H specialists worked with over 100 extension agents and more than 12,000 adult volunteer leaders in promoting programs in 40 major project areas. Among the projects were the 4-H Marine/Aquatic Education Program, the Annual Sweet Potato Show, a Citizenship Development Program sponsored by the Kellogg Foundation, 4-H Agricultural Career Awareness Internship sponsored by E. I. DuPont de Nemours Company, and many others.

Through this wide diversity of projects and programs CES at VSU continues, as its President Wesley C. McClure said: "to promote agricultural superiority and personal betterment for the citizens of the Commonwealth."[46] The Cooperative Extension Service at VSU is focusing its resources on solving major farming problems and helping to improve the quality of rural life.

At Langston University, agricultural research and extension activities have evolved into a classical model of cutting across all research areas and transferring research-based information directly to the people. Since Dr. Ocleris Simpson is the Dean of Research and Extension, the possibilities of conflict between research services and extension services has been virtually eliminated. The two industries that are the mainstays of research and extension at Langston are Goat Production and Catfish Production.

The largest research and extension area, Goat Production, is treated in Chapter 6 of this volume. The second largest research and extension area at Langston is aquaculture, with emphasis on caged catfish. This program has been popularized for several years by producers and the media. Langston's off-campus extension unit in Poteau, Oklahoma gained rapid recognition and acceptance throughout the Southeastern section of the United States. Dr. Conrad Kleinholz, one of the university's foremost researchers, was invited to Mississippi for short-course training in fish diseases. As a result of the expertise demonstrated by Langston's staff in research and extension, the university is called upon during the day, night, and weekend to respond to producers' problems in the area of fish diseases. During 1987, the fish program scientists were called upon by the Agricultural Marketing Service/USDA via a cooperative agreement in the amount of $30,000 to develop a computer model which could be used on site at producer ponds to analyze situations and predict profit and loss income. Dean Simpson believes that the resulting software from this activity upon catfish production will be of long-lasting usefulness in the state of Oklahoma.[47]

Langston is proud of Dr. Kleinholz's effectiveness in negotiating with the Japanese for cooperative endeavors. The university was also the site choice for Biosponge Aquaculture, Inc. of Wyoming when the need arose for research and technical assistance on catfish production.

This type of diverse interaction with private industry helps to provide a broad background for Ph.D. graduate students from the Oklahoma Cooperative Fish and Wildlife Research Unit who receive their research training at Langston University. In addition to the international interest that these scientists at Langston have attracted, they have, in 1989, published more than forty publications and abstracts, in addition to nine technical publications and nine popularized articles.

Langston's prominence in the state in the Angora/Mohair goat industry is no accident. Priority attention has been given to the Oklahoma Angora goat industry by newsletter, field days, workshops, lenders' seminars, technical paper, field demonstrations, letters and telephone conversations, county agents, the Oklahoma Goat Producers' Association, the Oklahoma Department of Agriculture, the Oklahoma City Fair Board, and the State Department of Health. Within a ten-year span and with a small staff and meager resources, Langston University has made a significant and lasting impact upon the state through its Goat Production and Catfish Production. Other emphases are evident in Langston's demonstrations in horticulture activities and its youth and home economics program which will be combined into a single 4-H program.

Extension efforts at the University of Arkansas at Pine Bluff (UAPB) are part of a unified statewide Cooperative Extension program through the University of Arkansas at Fayetteville. In 1971, Dr. Seegler J. Parker, the dean of the Division of Agriculture and Technology at UAPB, was appointed Research Coordinator of CSRS Programs and Extension Service at this institution. Parker wrote the first extension plan entitled, "Master Research Plan for Improvements in Living Conditions of Disadvantaged Rural People in Arkansas." Under this master plan, a variety of projects were initiated under such general topics as Farm Management, Horticulture, Live Stock Management, Family and Child Development, Home Improvement, Home Management, and Aquaculture. Joining Dr. Parker was a staff composed of Dr. Arthur L. Allen, Mr. John B. Clark, Mrs. Jimmie L. Edwards, Dr. Robert J. Felsman, Mrs. Earlene Larry, Dr. Irene K. Lee, and Mr. Thomas F. Baughns.

These staff members made tremendous impacts in all of the general areas listed above. For example, with reference to Dr. Felsman's work in Lincoln County, one farmer, W. Gene Reynolds, wrote: "I'll always be thankful for the information and guidance I received from the Extension livestock specialist. He has helped me reach goals in beef cattle production which have increased my profit margin. The increased pride that I have in my beef cattle operation gives me the incentive to keep trying to receive more."[48]

One of the most outstanding extension projects at UAPB is in the field of aquaculture. Extension's participation in fisheries began in April 1981 when a biologist in fisheries was assigned part-time to the research office. Since Arkansas is one of the leading states in total fish production when all minnows, fingerlings, and commercial catfish are included and second in catfish farming, it was only natural that UAPB should be involved. Early overtures into this area were made by Dr. Parker and O. R. Holiday who later became Coordinator for CSRS Program. They wrote a project entitled, "A Polyculture System of Fish Production for Disadvantaged Farmers in Arkansas," which sought (1) to identify the species of fish farming...which brought the greatest net profit to farmers; (2) to develop a combination of species for fish farming among disadvantaged farmers in Arkansas; (3) to compare cost of production between shallow and deep pond culture practices.[49] From this small beginning, the Extension Fisheries Program with the University of Arkansas Cooperative Extension Service is administered almost entirely through UAPB. Under the leadership of Dr. Charles A. Walker, its new chancellor who is highly supportive of research and extension, UAPB is destined to make an even greater impact in the state.

Aquaculture represents an economically viable alternative to row crop production and economically catfish returns may be four to five times higher than the net returns from soybeans, rice, or cotton.[50] In an effort to make aquaculture a more profitable and economically viable alternative crop, the Extension Fisheries Program at UAPB covers such subject areas as pond construction, feeding and pond management, disease prevention and diagnosis, reduction of catfish off-flavor, harvesting, water quality and economics, and marketing. All specialists are equipped with laptop computers for use in the field, and can readily access information from an aquaculture database entitled "Aquaculture Data Retrieval System." Several scientists are working on the potential intensive production of blue tilapia as bait or forage. The Extension Fisheries Program headquartered at UAPB is currently designing a blueprint or State Aquaculture Plan for the future growth and development of the aquaculture industry in Arkansas. With this plan, state and federal agencies, producer groups and universities will have a comprehensive guide to the action needed to sustain growth in the catfish and minnow industries.[51]

As in other 1890 institutions, at Tennessee State University (TSU) the Cooperative Extension Program was intensified with the receipt of USDA funding in 1972. However, TSU early recognized that service to the people of Tennessee was a primary mission of the university. In keeping with this philosophy the university established an extension or outreach program in agriculture and home economics in 1958 under the rubric of Division of Field Services. Notable accomplishments included instituting the annual Farm, Home, and Ministers' Institute which is still carried out today. The original compilation of this Institute indicated that "the two purposes of this great exposition are to encourage more agricultural and homemaking achievements and to mirror out progress in these fields of endeavor here at the University."[52] These Institutes still focus on organizing rural communities throughout the state and carrying needed educational programs to the people including leadership training in economic and community development.

With a federal budget of approximately $400,000, the Cooperative Extension Program really got underway at TSU in 1972. It began with an administrator, a secretary, and seven subject matter specialists —three in home economics, one in 4-H and youth, one in agriculture, and two in community resource development. Initially, four counties were approved for programs administered by TSU. From this point, the extension program has grown in budget, personnel, and scope of service to the citizens of Tennessee.

Still at the top of TSU's present extension programs, under the current direction of Dr. J. E. Farrell, is the Annual Farm, Home and Ministers' Institute. The themes for selected annual institutes will show the breadth of concern for problems of rural and limited-resource families in Tennessee. Some of the most noted were "Challenges and Strategies for Rural and Urban Limited Resource Families in the '80s" (1980), "Meeting the Challenge of the Eighties Through Agriculture" (1982), "Education, Research and Extension: The Key to the Survival of the Small Farmer" (1984), "Homecoming '86: Celebrating the Family" (1986), and "American Agriculture: Focus on the Future" (1989). Other activities include the biennial Tri-State Ministers' Institute, the Annual Health Fair, a Summer Feeding Program, and various agricultural programs with TVA, for example, an Experimental and Improvement of Intensified Vegetable Production and Marketing Programs and a Health and Nutrition Program.

Since the beginning of sustained federal funding in 1972, Cooperative Extension Programs at Florida A&M University (FAMU) have grown and expanded tremendously. Dr. Beverly B. Archer was appointed the first administrator with responsibility for the administration, coordination, and development of the programs from 1972 to 1980. Dr. Lawrence Carter was recommended by Dr. Charles C. Kidd, Dean of the College of Engineering Science, Technology, and Agriculture, and became the administrator in 1980 and has continued in that capacity to date.

In keeping with FAMU's aim for "excellence with caring," Extension efforts to involve those traditionally hard-to-reach or unreached populations have characterized FAMU Extension role and function as an outreach organization. Resources are directed toward identifying and alleviating the variety of problems of small farmers. Major FAMU Cooperative Extension Programs include: 1) Fruit Crop Production and Management Program for Small Acreage Dwellers in Florida; 2) Improving Production and Marketing of Small Vegetable Farmers in Florida; 3) Improving Production of Small Field Crop Farmers in Florida; 4) Improving Forage Production, Management and Utilization Practices in Florida; 5) Improving Production and Marketing of Small Forestry Producers in Florida; 6) Improving Production, Management, and Marketing Efficiency of Small Beef Herds in Florida; 7) Improving Production, Management, and Marketing Efficiency of Small Swine Herds in Florida; and 8) Improving Production, Management, and Marketing of Small Goat Herds in Florida and other states.[53]

Like several other 1890 institutions, FAMU is fast becoming a leader in goat production. Claude McGowan, FAMU Animal Science Specialist, has provided leadership in research and extension programs aimed at improving the productivity of the goat, mainly for meat. FAMU early recognized the important roles goat meat production can play in development efforts and as a complementary component of small-scale farm systems. Thus, the university initiated research and extension projects to take a closer look at goat meat production as an alternative enterprise for small-scale farmers. With grants from CSRS, the Heifer Project International, the Tennessee Valley Authority, and the Center for Cooperative Agricultural Programs, Scientists at FAMU and the Institute of Food and Agricultural Sciences (IDAS) have "secured funds...to conduct research that can provide a basis for applying production, management and marketing technologies to the cultural content of the traditional producer."[54] McGowan and his assistants have been able in a very short time "to implement 30 goat and forage demonstrations for the purpose of teaching farmers by telling, showing, and involving them personally in each operation from the production to the marketing phase."[55] A prolific writer, McGowan provides small farmers with considerable "how to do it" literature such as "Integrating Livestock into Small Scale Farm Systems." There are also nutritional studies designed to increase the awareness of consumers, wholesalers, and retailers concerning goat meat and its nutritional qualities.

Important in the CEP is the Florida A&M University's Extension, Research, and Instruction annual Small Farm Field Day which always draws more than 200 participants. Under Dr. Lawrence Carter, Director of CEP, the objectives are 1) to show small farmers research projects being conducted by specialists on goats, swine, beef cattle, vegetable, insect pests, fruit trees, and viticulture on the campus farm and; 2) to provide small scale farmers with information on the economic viability of alternative enterprises on small scale farms. The day usually concludes with a lunch featuring various goat meat, beef and pork dishes, other food from the University farm, and a wine tasting event sponsored by the FAMU Center for Viticulture Science.

With a target area of 15 counties in North Florida, FAMU's extension program is geared to meeting new initiatives devised by the national extension office. Alternative agricultural projects designed to meet the needs of rural communities and limited-resource clientele are emphasized. A summary of clientele contacts for fiscal year 1988 by program will show the importance of the program: Agriculture and Natural Resources, 11,970; Revitalizing Rural Communities, 3,696; Family and Economic Well-Being, 6,263; and 4-H Youth Development, 21,674 for a total of 43,603 contacts.[56]

As in most of the other 1890 institutions, extension service at Delaware State College (DSC) was poorly organized and supported during the early part of the twentieth century. In 1914, Samuel L. Conwell was employed as a field agent for the College and, two years later, was appointed an agent to do extension work among blacks under the provisions of the Smith-Lever Act. Since racial segregation was the rule at the time, Conwell was restricted to working with black farmers. He and other black agents who followed him were attached to the college and there is no evidence that a black professional was employed by the Agricultural Extension Service before 1944. The college, however, did provide some extension service programs for black farmers in Kent and Sussex Counties in Delaware.[57]

The allocation of $88,810 in 1972 by the federal government for extension service programs allowed Delaware State College to participate in the Cooperative Extension Service of Delaware for the first time. Through increased appropriations, CES has grown over the years. In the beginning, Delaware State focused on low-income families, on family living, and youth development; however, current extension work at DSC includes programs in agriculture, home economics, and 4-H and leadership training. In agriculture, agents assist residents with indoor and outdoor plant care, insect and pest control, pesticide use, landscaping and gardening. The home economics program involves providing workshops and special projects on energy conservation, stress management, parenting skills, money management, child care, building self-esteem, nutrition, and physical fitness. The 4-H and leadership program consists of two components: Career Enrichment and Weekend Enrichment. The extension staff also provides an annual Farm Visitation Week for pre-school, kindergarten, and first-grade children. Over 2,000 children participate annually in this activity which permits them to visit a farm, view farm animals, and become acquainted with the food-growing process.[58]

The Cooperative Extension Program at Alabama A&M University (AAMU) was established in December 1971 to provide services to the residents of twelve North Alabama counties. Under the overall leadership of Dr. James W. Shuford, Dean, School of Agriculture and Home Economics, it operates in conjunction with the statewide plan which includes Alabama A&M University, Auburn University, and Tuskegee University. Through 23 program components in four major extension areas—agriculture and natural resources, home economics, 4-H and youth development, and community resource development—CEP serves over 100,000 clients per year. As in other 1890 institutions, the primary focus of the program is to help disadvantaged and limited-resource families improve their quality of life. The five major areas of emphasis are: Alternative Agricultural Opportunities, Small and Home-based Business Development, 4-H Summer Education and Youth Enrichment Program, Rural Revitalization Conference, and Community Leadership Development.

Alternative Agricultural Opportunities concentrates on identifying high-value agricultural enterprises for North Alabama farmers, which include Shiitake mushroom production, sheep and goat production, vegetable production, containerized vegetable transportation, and alfalfa production. A successful example of AAMU's outreach emphasis can be seen in the establishment of Ala-Tenn Vegetable Marketing cooperative which serves vegetable and fruit producers in North Alabama and Central Tennessee. The cooperative packed 155 acres of vegetables in 1989, and projects 500 acres and $5 million gross sales in the next five years.

AAMU realizes that producers and landlords need up-to-date information on linking production decisions with marketing strategies, with emphasis on production, packaging, and processing to meet changing consumer demands. Dedicated specialists like Dr. Gene Brogher, Computer Applications Specialist; Dr. Cathy Sabota, Horticulture Specialist; and Dr. Steven Lukefahr are providing leadership on alternative enterprises, diversification of agricultural pursuits, business management skills, and financial planning. An example of success can be seen in the

Small and Home-based Business Development component. The major focus is to provide technical assistance and resource linkage to clients seeking to improve their businesses. Since its inception, over 100 small and home-based businesses have been assisted and they generate a gross income of over $500,000 annually.

The 4-H component provides through its Summer Education and Youth Enrichment Program outreach activities that serve thousands of young people annually. The Rural Revitalization Conference, which has been operating for more than 15 years, teaches lay leaders to explore innovative strategies designed to improve the quality of life in rural areas. Also, through Community Leadership Development, CEP has a commitment to the alleviation of rural problems through the development of community leaders.

The Cooperative Extension Program at Alcorn State University (ASU) operates under a memorandum of understanding between Alcorn and Mississippi State University which was signed by the presidents of the two universities. The agreement established at Alcorn a branch station, effective July 1, 1971, stipulating that "This station is known as the Alcorn Branch of the Mississippi Agricultural and Forestry experiment Station, and will concentrate its limited efforts on conducting research in the areas of feeder pig production and vegetable production for low-income rural people."[59] Thus, ASU became an integral part of the Cooperative Extension Program of Mississippi.

With the passage of the Farm Bill in 1977, the Alcorn Cooperative Extension Program (ACEP) was established, giving greater autonomy to ASU but keeping it a part of the statewide system through joint planning. Under the directorship of Dr. William C. Boykin, Dr.Jerome L. Burton, and the current director, Dr. Samuel Donald, ACEP has had considerable impact, especially in southwest Mississippi. Organized extension work began in 1971, giving counties the option to join and affiliate with the program as they desired. In the late 1980's, ACEP was made up of 13 cooperating counties and embraces the four areas as recognized in the National Extension Organization: Agriculture and Natural Science, Home Economics, Community Resource Development, and Youth Development. Within the broad areas listed above, ACEP is specifically involved in Family Economics and Management, Animal Production, Agronomic Production, Community Resource Development, Youth Development, Housing and Home Furnishing and Family Life and Child Development.

In disseminating information ACEP uses the following techniques: organized systematic instruction for program assistants; demonstrations in the field including process and results; contacts through correspondence and telephones; Field Days attended by an average of 1,400 people; leadership and community development conferences; and field visits. To further extend its services, ACEP established a ten-acre model farm on campus to demonstrate proper production and cultural practices associated with vegetable and fruit production. The model farm consists of five acres of horticulture and agronomy crops and five acres of fruit and nut orchards. Demonstration projects for catfish were established on the site as a soil and water conservation measure. An example of ACEP's success may be seen in the fact that farmers, through the work of ACEP, produced $8,958.08 worth of vegetable crops, and $1,204,099 of feeder pigs, slaughter hogs, goats and sheep.

Prior to 1965, a state office staff of five persons was housed on the Southern University (SU)—Baton Rouge campus. The members of the staff were blacks, employed by Louisiana State University Cooperative Extension Service in the various parishes (counties). After the passage of the 1964 Civil Rights Act, it was mandated that states could no longer have extension staffs segregated according to race. It was at that point that the extension employees of Louisiana State University (LSU) were transferred from Southern University—Baton Rouge to the Baton Rouge campus of Louisiana State University. Only the manager of the Southern University Livestock and Poultry Show remained at Southern University. A portion of his salary was paid by the College of Agriculture at Southern University.

In fiscal year 1972 (July 1, 1971) Congress enacted legislation that appropriated funds for administering extension programs at the sixteen 1890 institutions and Tuskegee Institute. These funds, however, were sent directly to the 1862 universities for issuance to the 1890 colleges and universities.

On November 15, 1971, a Memorandum of Understanding (MOU) between Southern University and Louisiana Cooperative Extension

Service of Louisiana State University was signed by Mr. John A. Cox, Extension Director and Dr. G. Leon Netterville, President of the Southern University System. The MOU became effective January 1, 1972. In keeping with his authority and responsibility, the extension director, with the consent of the president of SU, agreed to create and maintain a staff specialist element to be located on the campus of Southern University to reach the alienated, disadvantaged, and displaced families who were outside the mainstream of the conventional extension thrust. It was believed that unless the socially and economically deprived families residing in the rural areas, small towns and urban centers were provided with opportunities for upward economic mobility in their own communities, the current social and economic ills would become more intensified and difficult to solve.

The primary purpose of the Southern University—Louisiana Cooperative Extension Service was to develop training and demonstration programs designed to help the target groups acquire the skills and knowledge necessary to become effective contributors to society and to share equitably in the benefits of the extension and society. The initial program was to emphasize four program areas to reach clientele residing in seven Louisiana parishes. The program areas were: (1) Family Living; (2) Farm Management; (3) Community and Leadership Development; and (4) Youth Development.

On December 1971, Mr. Ashford O. Williams, an Associate State Agent in extension at LSU, was appointed Extension Coordinator by the president f SU and the Extension Director. In fiscal year 1972, only seven communities in seven parishes were selected so that the resources would not be diluted too greatly. The experiences in these selected parishes and communities laid the foundation for expansion.

Like other land-grant institutions, Southern University was provided permanent funding by the 1977 Farm Bill. Today, the Southern University Cooperative Extension Program is still an integral part of the Louisiana Cooperative Extension Service with a state office staff of nine persons comprised of an administrator, four subject matter/program specialists and support staff. At the field level, there are 13 Extension Aides (paraprofessionals) and 14 Extension Agents (professionals) employed in 24 of Louisiana's 64 parishes. Extension employees from Southern University are located in all nine areas (districts) of the state. Program areas emphasized include: (1) Family Life; (2) Family Resource Management; (3) Nutrition Education; (4) Alternative Agriculture; (5) Rural Revitalization; (6) Farm Financial Management; (7) Water Quality Education; (8) At Risk Youths and Leadership Development.

The Cooperative Extension Program at SU, like that of other 1890 institutions, suffers from inadequate funding at all levels, particularly at the state level. Only $232,000 of CEP's operating budget is appropriated by the State Legislature, about 25% of the total budget. These funds are appropriated for support of the Livestock and Poultry Show and fringe benefits for CEP employees above what is allowed from federal funds.[60]

The 1890 component of the Maryland Cooperative Extension Service is housed on the University of Maryland Eastern Shore (UMES) campus. The program and personnel are integral parts of the Maryland Cooperative Extension Service through which UMES and the University of Maryland jointly plan and render services to their constituents. Like other 1890 institutions, UMES's mission "is to provide educational assistance to new, unreached and hard to reach audiences with emphasis on disadvantaged and limited resource individuals, families and communities."[61]

Since the program began in 1971 the UMES Extension program has provided educational programs in agriculture, community resource development, home economics and 4-H and youth development through assistants, agricultural consultants, county extension agents and specialists. A few of the many educational programs that are currently supervised by Dr. Henry Books, the Administrator and Associate Director of the CEP, will be briefly discussed below.

In the area of Community Resource Development (CRD) extension agents and consultants have concentrated on helping small and part-time farmers and home gardeners. Working in a seven-county area, they have identified 896 separate units and are assisting them on a one-to-one basis in their agricultural activities. As a result, they have assisted their clientele in increasing the number of home gardens, encouraged small fruit producers, and assisted in the establishment of home gardens and roadside markets. Diversification, production and marketing are major concerns in community resource development. Thus, with the assistance of agents, consultants, and specialists, part-time farmers began raising feeder pigs and market hogs for home consumption and sale, others raised broiler-type chickens as a source of meat for their families, while others concentrated on egg production and the management of poultry flocks.

One of the extremely important services in this area involves keeping small and part-time farmers informed about services available to them through the Farmers' Home administration. Especially do they need information on loans for farming operations and retention of land by black farm operators. Also, CRD specialists have assisted with promoting public policy Education initiatives which focused on land loss by black farmers in America. As a result, UMES has worked with other 1890 institutions to develop strategies for influencing the legislative process to more effectively address the problem of land loss by blacks.

Other areas in which UMES extension personnel are involved include: "Providing Financial and Economic Development Advice" and "Developing Leadership Skills" among various groups in Maryland; "Learning to Manage Energy" especially for the elderly, low-income and other residential energy users in the two-county (Somerset and Worcester) area; "Increasing Seafood Awareness," and sponsoring the "4-H Double Dutch Fitness Program." These and other programs at UMES, Extension Administrator Henry Brooks wrote "assist limited resource individuals in developing well-rounded programs in agriculture, thereby contributing to more comfortable farm family living."[62]

At South Carolina State College (SCSC) extension work made its beginning under the presidency of Robert Shaw Wilkinson in 1911 through the traditional Farmers' Institutes. Wilkinson, along with his chairman of the Agricultural Department, Benjamin Hubert, traveled over the state aiding black farmers at institutes. The influence of these two black leaders encouraged the state legislature to appropriate $2,000 to the college in 1913 for extension work with black farmers. After the passage of the Smith-Lever Act in 1914, agricultural extension was intensified in the following years. According to Potts: "Extension work was considered so fundamental to the mission of the college that President Wilkinson served as director of Extension Work. A cooperative arrangement was formed with Clemson College in 1915 under the terms of the Smith-Lever Act to provide assistance to seven Negro agents...In addition, a demonstrator of Home Economics was employed under a similar arrangement at Winthorp College. During the same year, the Legislature appropriated $1,000 to carry on Extension work."[63]

At a conference on black extension work at the Georgia State College in Savannah, "it was brought out...that throughout the South, Negro agents (both farm and home) need better training in extension work, especially as agricultural economists..." In response to this need, in 1930 the Rosenwald Fund and the USDA appropriated funds to train black agent from Delaware, Maryland, Virginia, North Carolina, Georgia, and South Carolina. Between 1930 and the early 1950's, SCSC was not only involved in extension but at times took leadership roles on a regional level.

SCSC, which is currently building on federal funding which began in 1972, SCSC now has a budget of $800,000 for extension service. Through its extension staff, educational programs are carried to 12 counties of the state. As with other 1890 institutions, it mission focuses on serving the needs of minority, ethnic, limited-resource and disadvantaged men, women, youth, and the communities in which they reside. Alternative farming enterprises is also a major concern for SCSC. An example of this approach to helping limited-resource farmers can be seen in catfish farming in Hampton County. Area County Agent Ishmel Washington, reported in 1989 that: "Growing catfish in cages is a very viable alternative agricultural enterprise for Hampton County farmers, especially the small farmers with limited resources."[64] Farmers were reported to have grown 500 pounds of fish per cage. In developing community resources, in finding alternative farming endeavors, in overseeing the Soil Conservation Service and in dealing with problems of the elderly and youth, SCSC's extension staff is there giving assistance.

The beginning portion of the chapter clearly pointed out that Tuskegee University was an early leader of Extension work and set the patterns for 1890 land grant colleges to follow. It extension service has always focused on helping people. In the 1920's and 1930's one of the major efforts was directed toward an erosion control problem. Consequently, millions of acres of land was terraced. During the 1940's and early 1950's, the university's extension work concentrated on a "Live-at-Home" program which deals with "producing your own feed through such things as gardening, fruit trees, and meat production, i.e., pork, poultry, and beef."[65] In the 1950's and early 1960's diversification of crops and beef production were major extension programs of Tuskegee. Home economics, nutrition, clothing, home management, and home furnishing, which included quilting, were programs implemented for farm families.

Although Tuskegee was involved in considerable extension work almost from its inception, its services were intensified and expanded in 1972 when the school, along with sixteen 1890 land-grant institutions, became a recipient of sustained federal funding. The comprehensive program of the Tuskegee Cooperative Extension Service (TCES) was expanded to cover every facet of social, cultural, and economic well-being of the rural disadvantaged people of South Central Alabama.

Between 1972 and 1977, the TCES was organized on the program areas prescribed for Cooperative Extension on a national basis: Agricultural and Natural Resources, Home Economics, 4-H, and Community Resource Development. Tuskegee's Extension staff serves limited-resource and small producers in 12 contiguous counties located in Central, West Central, and Southeast Alabama. A large variety of services are offered.

In the 1970's beef cattle production focused on beef upgrading by infusing germplasm from pure bulls into entire herds resulting in an improvement in overall quality and value of each herd. Gardening in cooperation with the Tennessee Valley Authority and an emphasis on food preservation were major thrusts in reaching clients. In the 1970's and 1980's program emphasis was on production and marketing. Some of the target areas in which TCES personnel gave guidance and assistance were cattle, swine, vegetables and fruits, management-herd health, forests, soil, small and home businesses; youth development —livestock judging, youth camps, leadership training, programs, agricultural careers, health and nutrition, infants, elderly, teenagers and pregnant mothers; home skill development—sewing, cooking, preserving foods, energy conservation; and community development—water systems, roads, housing, volunteerism, and family well-being.[66]

Perhaps more than any of the 1890 institutions, Tuskegee has had its extension history effectively researched. Most of the research has been done by Dr. B. D. Mayberry and published in a volume entitled *The Role of Tuskegee University in the Origin, Growth and Development of the Negro Cooperative Extension System, 1881–1990.*[67] As we complete the last decade of the twentieth century, Tuskegee Cooperative Extension Service will follow closely the most recently defined national initiatives in carrying out its programs. However, its major focus will still be limited-resource farmers, small producers, and rural people and their increasing needs for greater assistance.

The Cooperative Extension Service at North Carolina A&T State University operates through the major programs of Agriculture and Natural Resources, Home Economics, 4-H and Youth Development, Rural Leadership Development, and Communication. With Dr. Daniel D. Godfrey as the Administrator of A&T's Agricultural Extension Program, the university is working closely with Agricultural Research to deliver information and assistance designed to improve living conditions primarily for small farmers, limited-resource families, and rural residents of North Carolina.

Small-scale agriculture is one of the major emphases of A&T's Cooperative Extension Service. It delivers service and assistance through its Farm Opportunity Program (FOP), which is concentrated in 18 North Carolina counties where small-scale agriculture needs the greatest attention. Planning, management, and record keeping are emphasized as extension agents and paraprofessionals work one-to-one with farmers and landowners. FOP began operating in 1974 and during its sixteen years of existence has employed nearly 90 paraprofessionals who, under the supervision of agents and specialists, have served thousands of farmers and limited-resource clientele. Its message to small farmers is to diversify their farming operations and develop new crop and/or livestock mixes.

Retrospect '83 reported that "more than half of North Carolina's small farmers earn less than $12,000 a year, even when their off-farm income is included. In the long run, the fate of many small farmers is tied to their ability to adopt modern management, production, and marketing techniques."[68] A&T's Extension specialists and researchers have concluded that they can not only help limited-resource farmers to survive, but even to thrive. It has been found that through the use of better agronomic methods and different crop mixes, income from many farms could be increased remarkably— even doubled or tripled. Small-scale farmers must be taught that farming is a business and the key to business management is record keeping.

With the assistance of USDA and its associate agencies, the other North Carolina land-grant university, North Carolina State University, and state agencies, A&T Extension is having a tremendous impact on small farmers throughout the state. It has completed a massive public awareness campaign in cooperation with the Soil Conservation Service to disseminate information on soil conservation provisions in the 1985 Farm Bill. Also, A&T Extension received a grant of $247,500 from the North Carolina Department of Commerce to make the machinery on North Carolina farms more energy efficient.

A&T Extension coordinates two programs for youth throughout North Carolina. Its 4-H in Public Housing program introduces the traditional 4-H learning environment to young people living in public housing or other low-income communities. A second program was Partners-in-Learning. In 1989, approximately 36,000 "mini-projects" were distributed to 81 counties in conjunction with PIL. Other more traditional 4-H programs were carried out.

The success of A&T Extension's leadership in rural leadership development convinced the W. K. Kellogg Foundation to award a $1.2 million grant to design a leadership development program, Community Voices, for limited-resource audiences. This program emphasizes that these leadership roles can be enhanced through knowledge and training to enable citizens to become more active in various public and community decision making activities. Also A&T's video series, "Way to Grow—Money Making Ideas for Small Farmers," is an excellent technique for introducing small farmers to alternative agricultural enterprises.

The Cooperative Extension Program (CEP), with Dr. Hoover Garden as its administrator, is the educational arm of Prairie View A&M

University (PVAMU) and the U. S. Department of Agriculture. Its purpose is to effectively extend research-based educational assistance directly to families who desire and need Extension's help in twenty-six counties. While services are extended to all groups without regard to race, color, or economic conditions, the major focus is on the needs of low-income families of the state. CEP constantly seeks to identify program thrusts and methods of delivering information to low-income groups with the aim of enabling them to move into the mainstream of society.

Since beginning more intensive extension services after 1972, competent Extension staff members have implemented issue programming and innovative programming that have resulted in hundreds of farm families and limited-resource families and individuals becoming more efficient in selecting, producing, and managing farm and rural enterprises. Noticeable gains can be documented in families beginning to manage resources wisely, improve diets, and participate in nutrition and health education programs for a healthier lifestyle.

The Cooperative Extension Program at Prairie View summarizes its issue and innovative programs as follows: whole farm and the low/reduced input farming systems; forestry management workshops; nutrition and health education programs for more healthy families; State Rural Revitalization Conference in order to provide information on small-town and community improvement; youth leadership and career awareness programs; and many programs in natural resources.[69]

A unique feature of the delivery system of the Prairie View CEP is the use of paraprofessionals (program aides) who serve as catalysts in motivating and assisting hard-to-reach families by helping them become aware of and adopt new, improved practices for self-improvement. Paraprofessionals are selected from members of the target audience and are somewhat successful in their respective communities in gaining acceptance from the target audience. The paraprofessionals work under the supervision of a designated Extension Agent with backup support from specialists and faculty members from both PVAMU and the Texas Agricultural Extension Service. The paraprofessional idea works well because the program aides are well-chosen, competent residents of the county, who work with individuals and/or families in small groups and on an individual basis. This program was reevaluated and expanded in 1987.

The five major programs and areas of emphasis implemented by CEP at Prairie View focus on reaching low-income and minority groups, but they can and do serve other groups. The five programs and some of their areas are Agriculture (beef cattle production, dairy goat production, commercial vegetable production, swine production, home vegetable gardening, marketing, pecan production, corn production, etc.); Natural Resources (catfish production and marketing, forestry production and management, wildlife management, hunting lease management); Home Economics (See Chapter 8); Community Resource Development (community clean-up, community organization, home construction, rural health care planning, rural revitalization, etc.); 4-H and Youth Development Program (animal and livestock projects, entomology, horticulture, safety, leadership/citizenship projects, career exploration, etc.).[70]

Although PVAMU is known widely for its leadership through the International Dairy Goat Research Center and for outstanding results in the six areas listed above, Administrator Carden is especially proud of Extension's success in reaching the young people of the state. The Dairy Goat Field Day for 4-H and Youth, the 4-H Dairy Goat Judging contest, the Outstanding leadership award and the Double Dutch for Fitness Day are just a few examples of activities with youth. Of great value is the H. S. Estelle 4-H and Youth Camp, which operates six weeks each summer with approximately 100 youth per week. The camp emphasizes learning, horsemanship, and swimming. With additional funding, Administrator Carden hopes to extend these already successful educational programs in Extension to families and individuals in at least fifty Texas counties.

Although most 1890 institutions and Tuskegee University were involved in some type of outreach or extension work from the very early years, their efforts were generally poorly supported and took place in the form of conferences, institutes, short courses, fairs, and in a few cases the movable school patterned by the Jesup Wagon. When the Smith-Lever Act of 1914 established the Cooperative Extension System as a joint venture of the U. S. Department of Agriculture and land-grant institutions in the states, the biracial social system prevented 1890 institutions from becoming partners. Thus, in a variety of segregated and ill-supported arrangements, 1890 institutions delivered extension services to black people in their respective states. This segregated and discriminatory arrangement was declared unconstitutional in the mid-1960's.

With pressure from the Council of Presidents/Chancellors and allies from other areas, Congress responded to the needs of 1890 institutions and reestablished Extension Programs in 1972 under the Agricultural-Environmental and Consumer Protection Appropriation (AEC) Act which provided for specific opportunities for predominantly black land-grant institutions to be directly involved with each state's Cooperative Extension Service in planning and implementing Extension Education Programs. The guidelines established by the Food and Agricultural Act of 1977 differed from the 1972 legislation in that "it eliminated the role of the state Extension Service in distributing funds to the 1890 Extension Programs in those states with both systems. This Act—and subsequent legislation enacted in 1981—provided for the autonomy of the 1890 Extension Programs in allocating the funds set aside by Congress for their use.[71]

With the advent of sustained funding for 1890 institutions, including Tuskegee University, these "eligible" institutions intensified their efforts to disseminate educational information and deliver services primarily to limited-resource farmers and families to the extent that they would be able to move into the mainstream of society.

As 1890 institutions move toward the twenty-first century, the emphasis is shifting from disciplinary programming to strategic planning and issue programming. The focus is on methodology— molding programs to fit the critical national issues that need to be addressed by Extension's nationwide educational network. In 1988, a National Priorities Task Force for the Cooperative Extension System identified eight new initiatives which signaled a change in direction for delivering service as the twenty-first century approaches. These initiatives are (A) Alternative Agricultural Opportunities; (B) Building Human Capital; (C) Competitiveness and Profitability of American Agriculture; (D) Conservation and Management of Natural Resources; (E) Family and Economic well-being; (F) Improving Nutrition; (G) Revitalizing Rural America; and (H) Water Quality.

Working within the framework of these national initiatives, 1890 institutions will continue to realize that they "exist to serve people," and the needs and concerns of blacks, other minorities, and limited-resource people will be foremost on the agenda for service. As the little booklet *Serving People in Need* states: "In the broadest terms, the clientele of 1890 Extension Programs are people with disadvantages that prevent them from achieving their full potential—disadvantages that turn those people who could be assets in our society into liabilities, unless they are reached with assistance. Assuming increased financial resources at both the federal and state levels, 1890 schools make a tremendous impact in America in revitalizing our communities, strengthening our families, encouraging our youth, our elderly, and assisting our rural and farm families in finding alternative opportunities in diversifying, producing and marketing their goods and services."

CHAPTER EIGHT

Home Economics—
*Our Roots, Our Present, Our Future**

> Home Economics is a timeless profession, ever evolving to meet the needs of humankind. At 1890 colleges and universities, home economics programs not only integrate knowledge and services from various disciplines to enable individuals and families to improve their quality of well-being, but home economics uniquely touches the "hearts" and "spirits" of people and bestows on them human value, character, and dignity—the very essence of the preservation and progression of humanity.
>
> Walter Washington
> President, Alcorn State University

HOME ECONOMICS is an integral and significant part of the land-grant function of the 1890 colleges and universities. This chapter provides an historical perspective of the teaching programs, including prebacalaureate to graduate education. A discussion of historical developments in home economics research is presented, with emphasis on formula-funded research performed by home economics units. Extension home economics is described briefly with the intent of providing examples of the delivery systems and program accomplishments. Finally, this chapter provides a futuristic perspective of home economics at 1890 institutions, including specific views of 1890 home economics administrators and leaders.

---

*This Chapter was written by Dr. Esther Glover Fahm, former chairperson of the Department of Home Economics at Alcorn State University, Lorman, Mississippi. Currently, she is Dean of the School of Home Economics at the University of Wisconsin-Stout, Menomonie, Wisconsin.

Home economics teaching programs at 1890 colleges/universities have evolved from classes in manual training and domestic science to integrated curricula in specialized home economics disciplines. These instructional programs have historically responded to societal changes and to the educational and developmental needs of black people, the clientele these institutions were created to serve. Developments in home economics at 1890 institutions have been impacted by the changing role and scope of 1890 institutions over time; the movements in higher education related to women, particularly, black women; and the developments in the home economics profession in higher education.

The inception of home economics teaching programs as well as organized home economics units dates back to the 1880's, approximately two decades following the abolition of slavery. Emancipation had delivered into our society approximately four million blacks, most of whom were uneducated, unskilled and ill- prepared for their newly found freedom and independence. Approximately three million freed slaves were school age and older, and were engaged in unskilled agricultural and domestic labor.[1] Home economics subject matter was directly relevant to the social circumstances of that time. Early classes seemed to have evolved from the need for educational progress and for upgrading the occupational skills of blacks at that time in history. These classes emphasized practical education, and many of them were of grade school or high school level. This type and level of training was consistent with the educational needs of clientele served and the mission of 1890 colleges/universities during that period. Early classes were limited in scope and to only a few aspects of the field of home economics as it is known today. Nevertheless, these offerings marked the beginning of instruction in home and domestic concerns at 1890 colleges/universities, and characterized a prebaccalaureate era of instruction which eventually led to the degree programs offered today in home economics in 1890 colleges/universities.

Prebaccalaureate instruction in home economics began in 1880—the earliest reported year for teaching home economics- related subjects at 1890 colleges/universities (Table 1). Nearly a half century elapsed before the first class in home economics is known to have been taught at every 1890 institution. Records regarding the level of training are fragmented. However, original class offerings included the sixth or higher grades, high school as well as college-level training.

Southern University is the first 1890 institution known to have begun instruction in home economics-related subject matter. This institution, founded in 1880, began high school courses in domestic science that same year. The mission of the domestic science program was "to educate students in the basic principles and concepts of home living."[2] This program was available only to girls and emphasis was placed on food preparation, sewing and housekeeping skills. Later in 1914, the first unit named "Home Economics" was established at the University and a two-year teacher training program was developed by Mrs. E.N. Mayberry, the first Director of Home Economics. This teacher training program was approved under the State Vocational Education Act in 1916. The central mission of the Home Economics unit then became that of preparing home economics teachers and home demonstration agents to work with citizens to improve quality of life. The two-year teacher training program was the forerunner of the bachelor of science degree in home economics at Southern University.[3]

Additionally, in the late 1800's, the beginnings of home economics teaching programs emerged at other 1890 colleges/universities, and forerunners of home economics units today continued to be established. In 1881, Alabama A&M began classes in plain and fancy sewing, cooking, and laundering, and a "Department of Domestic Science" was organized by 1891.[4] In 1883, Tuskegee University began non-collegiate classes in mechanical industries, including dressmaking, millinery, cooking, canning, baking, and tailoring.[5] Classes in sewing, laundering, and cooking were introduced at Prairie View A&M in 1888 with Miss Ewell as the first teacher.[6] In 1890, Kentucky State University was designated as a land-grant institution, and classes in home economics were added to the school's curriculum within the next seven years.[7] Fort Valley State College began high school classes in art, craft, and vocational trades in 1895 as a part of the original offerings of that institution.[8] The University of Arkansas at Pine Bluff (UAPB) and Virginia State University were also pioneers in teaching home economics-related subjects at 1890 colleges/universities. In 1897, UAPB organized a "Department of Plain Sewing", which initiated classes that same year in applied art, garment-making, and millinery. The establishment of this Department was among the first efforts of UAPB to fulfill its land-grant mission.[9] In 1899, Virginia State began a normal course in domestic science, which included instruction in sewing and cooking.[10]

At the turn of the twentieth century, home economics-related subjects continued to emerge, and by 1925, available records show that such classes were included in the offering of most 1890 colleges/universities (Table 1). Major emphasis of courses initiated during this period continued to include skills in sewing, cooking, and laundering. However, examples of these offerings reflected changing trends in course homenclature and expanded emphasis on issues of the family and

In 1900, Langston University initiated classes in domestic science and art which evolved into a "Department of Domestic Economy" by 1910.[11] The mission or aim of that Department was "to give young women the kind of education which they need to enable them to properly discharge the duties and bear the responsibilities of home life."[12] Domestic sciences included courses in Foods and Cookery, Marketing, Serving, and Household Economics. Interestingly, the Langston University 1910 Catalog described the "Foods and Cookery" course as "a systematic study of the principles and methods involved in the preparation of foods, care of kitchen, table-setting and serving. "Serving" was described as a course for "advanced classes and consists of instruction in the following subjects: table-laying; serving of breakfast, luncheon and dinner; laundering; preparation of beverages, salads and desserts; and general care of the dining-room. "Household Economics" was described as instruction in the selection, purchase, preservation, preparation, construction, decoration and equipment of a house.[12] "Marketing" was not described. Classes offered in domestic art consisted of plain sewing, dressmaking and millinery. A certificate was awarded upon satisfactory completion of all courses. "Special students" defined as "only girls of the eighth or higher grades" were admitted into the courses and were eligible for a certificate upon completion. Students below the eighth grade who wished to specialize could do so, but they were ineligible for a certificate.[12]

In 1902, Delaware State College offered instruction in areas such as hygiene and sanitation, household handicrafts and furnishings in addition to cooking, sewing and laundering. These classes met in the

College Dining Hall and in the basement of a classroom building. By 1912, a course of study in Domestic Science was offered and three rooms in the President's Cottage were converted to a kitchen, dining room, and workshop area to support the program. The primary goal of the program was to prepare high school female students to become thrifty, economical and successful wives and mothers.[13] The Domestic Science program was one of only four courses of study offered by the institution at that time. A certificate was awarded upon successful completion of the program. In 1923, a Junior College Division was added to the institution and a two-year curriculum in Home Economics was initiated which met accepted collegiate standards. During that time the program was housed on the third floor of the Dining Hall. The two-year curriculum was the origin of offering "Courses in Home Making Leading to a Bachelor of Science Degree" initiated during the 1930's at Delaware State.[13,14]

In 1903, Alcorn State University officially became a coeducational institution, and the first dormitory for women, Truly Hall, was erected. That same year, college-level courses in sewing, cooking and laundering were offered and three women instructors were hired. The initiation of these courses is attributed largely to the earlier efforts of the fourth President of the University, Thomas J. Calloway, who started the movement for admittance of girls to the institution. In a report to the State Board of Trustees in 1895, then President Calloway stated:[15]

> In my report to you May 25, last, I stated that I had visited all the leading schools for colored people in Virginia, North and South Carolina, Georgia, Alabama, Tennessee, and Kentucky, Arkansas and Missouri. Alcorn College is the only one strictly speaking that is for boys only. Comparing the educational work of other schools to ours, I am satisfied that boys are better educated in the presence of girls...

Although President Calloway was unsuccessful in gaining admission for girls, his work on behalf of education of Negro women in Mississippi laid the foundation for the eventual recognition that girls needed an education to become more proficient in caring for the home, rearing children, and command of the social graces.[15] By 1906, a "Sewing and Dressmaking Department" was organized at Alcorn. The Department offered a three-year terminal course in sewing, and a two-year course in dressmaking. The mission of the Department then was to "provide a comprehensive course of study in those branches which related to healthful and appropriate clothing of the body, and to household decorations."[16] Course offerings included sewing, dressmaking, art-needlework, costume designing and millinery. Also by 1906, a "Domestic Science" Department was established at the institution. The aim of that Department was "to give students practical instruction in all that pertains to good housekeeping."[16] The initial offerings consisted of a three-year course in domestic science which included instruction in cooking, housekeeping, sanitation and care of the sick. Course offerings expanded over the next few years, and by 1911, the program included courses such as Tissue Building Foods, Food Production and Manufacture, Preservation of Foods, Invalid Cooking, and Diet for Babies. The mission of the Domestic Science Department was then restated:[17,18]

> To give girls who live in rural districts and small towns in Mississippi a thorough training in Home Economics to fit them for responsibilities that must devolve upon them for the future welfare of the citizenship of the State, in whatever walk of life they may be called, whether home-life or an occupation for a livelihood.

A certificate was awarded for successful completion of all courses in both Departments.

In 1908, the first college-level curriculum was initiated at Prairie View with Smith Hughes Vocational Funds, and the "Girls Industrial Department" was established. This Department was a forerunner of the "Domestic Art and Science Department" established in 1923. The primary aim of early programs was to prepare students for performance of household tasks. Curricular offerings consisted of a two-year course in dressmaking, a one-year course in cooking, and a one-year course in housemaking. These courses were designed for three classes of students: (1) those who could not afford the time or expense for a longer course and desired to utilize their time directly to acquire additional skill in some phase of home economics with an intent of following it as a trade; (2) those who were engaged in some trade, but felt a need for acquiring additional skill to perform their work; and (3) those who were deficient in college entrance requirements.[6]

In 1912, Tennessee State began non-collegiate courses in domestic art and science which were similar in nature to those offered earlier at other 1890 colleges/universities during this period. The domestic science and art classes were a part of the original offerings of Tennessee State. More than 200 students enrolled in these classes the first session, making the domestic art and science program one of the largest program offerings of the institution at that time. The program provided training for grades six through twelve in a two-year normal course. The mission of the program was to prepare teachers of cooking and sewing in public and private schools and to provide training for homemakers, housekeepers, and matrons. In 1918, the name "Home Economics" appeared for the first time in the Tennessee State's Catalog, and by 1920, a college-level teacher education program in home economics was initiated. That program was a two-year curriculum which led to an associate degree and it was the forerunner of a four-year college curriculum in home economics at Tennessee State.[19]

In 1917, South Carolina State College established a Department of Home Economics, the first unit at the College to focus on family and home concerns. The mission of the Department at that time was to assist the institution in achieving its mission and goals by providing educational experiences for optimum student achievement and personal growth. Uniquely, South Carolina State recorded courses such as "human growth and development," "history and philosophy of education," and "sociology" as courses leading to the development of the baccalaureate curriculum in home economics at the institution.[20]

In 1925, the University of Maryland-Eastern Shore (UMES) organized a "Domestic Science" unit. The mission of that unit was to provide "domestic art and science education to the end that the productivity of the farms may be increased, and the Negro population advanced in general education and intelligence." Early classes offered included food study, economics of the family and home, and textiles and clothing construction.[21]

Little is known about the prebaccalaureate instruction at other 1890 institutions. At North Carolina A&T, classes in vocational trades are believed to have preceded baccalaureate programs.[23]

Kentucky State University began a program in home economics in 1895.[23] Whether or not this program met acceptable standards for a four-year collegiate program is unclear. Little information is available on the nature of this early program and its graduates. However, the mission of the University at that time was "to provide training of black teachers for black schools in Kentucky."[7] Thus, the home economics program is believed to have been an education program designed to support that mission.

Kentucky State's mission, academic emphasis, and structure have changed many times over the years. Teacher training, vocational home economics, and dietetics are a part of the rich history of this University.[7] Today, Kentucky State offers two (2) Bachelor of Arts degrees in the home economics field, both of which were initiated in 1975: (1) Child Development and Family Relations, and (2) Textiles, Clothing, and Merchandising.[23] The latter program has an interdisciplinary focus and provides for specialization in either art or business. Additionally, an Associate in Applied Science Degree in Child Development and Family Relations is offered.[24] These degree programs are offered through the Department of Home Economics, a unit within the College of Applied Sciences. Additionally, the Department operates the Rosenwald Center for Child Development which serves primarily as a laboratory for students enrolled in the Child Development programs. Having gained accreditation in July 1986, the Center became the first unit of its kind among colleges/universities in Kentucky to be accredited by the National Academy of Early Childhood Programs. The Center serves approximately 93 infants and children from four weeks old to kindergarten.[23]

Consistent with the designation of Kentucky State as a liberal studies institution in 1982, the curriculum in home economics includes a sequence of courses called "integrative studies" which treat fundamental issues in literature, history, fine arts, philosophy, and political theory, as well as the traditional humanities.[7] Additionally the curriculum is planned to provide a comprehensive educational preparation in specialized home economics areas and to help students become creative, effective individuals and family members. Further, in the absence of agricultural programs at the University, the Department of Home Economics has a chief role in carrying out the land-grant mission of teaching, research, and public service. The current head of the Department is Dr. Herman Walston, one of two males to head home economics units at 1890 institutions today. Alabama A&M was among the pioneer 1890 colleges/universities to offer a four-year curriculum in home economics or a related field. In 1898, a bachelor's degree in Domestic Science was approved at A&M, and the first degree was awarded by the Department of Domestic Science that same year.[4] This Department was one of five academic departments of the institution. In 1905, the institution reorganized academic Departments into mini Schools, including the School of Domestic Science.[14]

By 1920, the Domestic Science unit at Alabama A&M was renamed "Home Economics."[4] However, the institution had been designated Junior College status in 1919 and awarded two-year certificates in home economics and other fields until 1939, when A&M was again granted senior college level status. Home economics was among the B.S. degree programs to be reinstated in 1939. The Department began offering a B.S. degree in Vocational Home Economics Education which entitled graduates to a vocational teaching certificate.[14]

Teacher education remained the primary thrust of the Department of Home Economics at Alabama A&M from 1939 until 1977 when specialized majors were added to the curriculum. During that period, the Home Economics unit was reorganized in response to program and enrollment growth as well as the university-wide reorganization of academic units. The final reorganization of the Home Economics unit took place in 1976 when the Schools of Home Economics and Agriculture were merged to form the School of Agriculture and Home Economics. The Home Economics unit then became a Division within the newly formed School.[4] Dr. Virginia Caples is currently Associate Dean of the School and Head of the Division of Home Economics.

Today, the central focus of the Division of Home Economics at Alabama A&M is the family and individual within a broad context, and the interrelationship of each to their environments. Programs are designed to promote and enhance the development of academic, social, economic, and personal competencies that are essential for life skills and accomplishment of personal and professional goals. The Division of Home Economics offers three undergraduate degree programs: Food and Nutrition; Clothing, Textiles and Related Arts; and Human Development and Family Resource Management.[4] The Food and Nutrition degree was first offered in 1977.[4] The current program focuses on human nutrition, food and hospitality services, and emphasizes social, economical, and ecological factors related to nutritional health and hunger.[14] The program is approved by the American Dietetic Association (ADA) as a Plan IV/V Program. The Clothing, Textiles and Related Arts program was first developed in 1978, and the program has evolved today with an emphasis on merchandising, design, and interiors.[4] Instruction emphasizes ecological, social, and economic aspects of apparel, interiors, and textiles.[14] The Human Development and Family Resource Management degree was initiated in 1978.[4] The program emphasizes studies in child and adolescent development, family relationships, home economics education, and resource management.[14]

More than one hundred students (head count) currently major in undergraduate home economics programs at Alabama A&M. Human Development and Family Resource Management has the largest enrollment.[4] The Home Economics unit has been fully accredited by AHEA since 1985. A unique feature of the unit among 1890 institutions is the Family Center, which was established in 1980. The major goal of the Center is to strengthen the black family.

Alcorn State University offered its first four-year curriculum in home economics in 1916. The program led to a B.S. degree in "Teacher Training in Vocational Home Economics." The first degree in this major was awarded in 1919 to a class of seven females. In 1923, this degree program was discontinued and was replaced by a degree in "Vocational Home Economics" which was approved in 1921 under the provisions of the Smith Hughes Act.[25] This program marked the beginning in earnest of the teacher training era at Alcorn.

The early Vocational Education program at Alcorn was described as a "professional course for girls" that included one year of basic training in general home economics. This training was required of all girls who enrolled at the University. The next three years of the program included coursework in domestic art and science, hygiene and sanitation, home nursing, chemistry and physics, household management, general methods of education, and special methods in home economics which included practice teaching. Mrs. O. K. Benson was the vocational home economics professor.[26]

Teacher education continued to be the sole thrust of the home economics academic program at Alcorn for thirty years. The program flourished from its inception through the sixties, and was virtually the sole source of black vocational home economics teachers in Mississippi during this period. Today, the program has evolved into a Home Economics Education degree which provides concentration in vocational as well as occupational home economics. The current program provides background in general home economics with emphasis in science, specialized home economics and professional education.

Food and Nutrition was the first specialized major in home economics to be offered at Alcorn. The curriculum was first added in 1952,[25] and this discipline has been a major emphasis of the institution since that time. Today, the program focuses on dietetics and the food and nutritional sciences, and is supported by top-line nutrition laboratories. The program was first approved by ADA in 1983 under Plan IV, and approval was most recently reaffirmed in 1989 for ten years under Plan V.

Program expansion continued in the fifties at Alcorn with the addition in 1956 of a B.S. degree in Home Economics,[25] which is still offered today. The current program provides academic preparation in diverse home economics disciplines. In 1983, a program option was added in Clothing and Merchandising which has grown into the largest program offering in home economics today at Alcorn.

The fourth and final degree program offered today by the home economics unit at Alcorn is Institution Management, which was first introduced in 1974.[25] The original program focused on food service management, and was first approved by ADA in 1983 with a management emphasis. Today, the program has been redirected toward hospitality management with emphasis on restaurant and food/beverage services. The institution management laboratory completed in 1982 is the most modern fully-equipped teaching laboratory of its kind among state-supported colleges/universities in Mississippi.

Degree programs in home economics at Alcorn are currently offered through the Department of Home Economics, which is one of three academic units within the Division of Agriculture, Research, Extension, and Applied Sciences (AREAS). Dr. Esther Glover Fahm is the current chair of the Department. The unit has emerged through several organizational structures over the history of offering baccalaureate programs. In 1923, Alcorn established a Division of Home Economics as a separate entity of the University. This Division was the first unit at the University to be named "Home Economics." Mrs. Eunice Davis Powell, an alumna of the first home economics baccalaureate class of 1919, became the first Director of the Division. In 1962, the unit was reorganized as a Department within the Division of Vocational Education. The final reorganization took place in 1972 when the present organizational structure was effected.[26]

Alcorn is the only historically black college/university in Mississippi to offer home economics, and has contributed substantially to the development of black home economics professionals in the state. Graduates have attained leading positions in education, business, human services, and government at state and national levels. Notably, the first black female to be elected to the Mississippi House of Representatives, the Honorable Alyce Clarke, as well as the current President-Elect of the American Home Economics Association, Dr. Virginia Caples, are both alumnae of the Department of Home Economics at Alcorn. According to its current mission statement, the Department of Home Economics maintains a strong commitment to providing education for minorities to serve as role models in the home economics profession, as well as to providing education for individuals of diverse academic talent, ethnicity, and socioeconomic backgrounds. Programs of the Department aim to prepare individuals for life-long learning, critical thinking and global awareness and for diverse professional service in home economics and society.

Prairie View A&M University began a B.S. degree in Domestic Art and Science in 1916, and awarded its first degree in that major in 1921.[6] During that period, this degree program was offered by the Domestic Art and Science Department. By 1923, the unit was renamed the Division of Home Economics and Mrs. Elizabeth C. May Galloway became Supervisor, Director, and the first Dean of Home Economics. The Division consisted of Departments of Domestic Science and Arts, and Millinery. Teacher training was the major part of the program. The role and scope of the Division was "to inspire and stimulate interest in continued study, to train for accuracy, to help the student find her place in the social and economic world, and to increase the students' stock of information."[6] The curriculum was designed to prepare individuals for teaching, for graduate study leading to technical and professional careers, and for problem-solving in daily living.[6]

Home Economics at Prairie View continued to develop into an integral segment of the institution, and baccalaureate programs in home economics expanded over the next three decades. A program in Home Economics Education was implemented in 1930, Food and Nutrition in 1947, and Clothing and Textiles as well as Child Development and Family Relations began in 1951.

Additionally, the period of 1923–64, the years of Dean Galloway's administration, marked major progress in physical facilities and other areas of home economics at Prairie View. In 1955, plans were completed for the Home Economics Building and the facility was erected by 1958 and named Elizabeth C. May Hall. Student professional organizations were installed, including the Home Economics Club in 1938, and the Beta Epsilon Chapter of Kappa Omicron Phi Honor Society in 1963.

During 1964 to 1987, home economics at Prairie View continued to develop, and the program gained national recognition under the competent leadership of Dean Flossie M. Byrd. The Food and Nutrition program was approved by ADA for the first time. The home economics unit gained full accreditation by AHEA in 1977, and thereby became one of the first 1890 units to be accredited by AHEA. During the next ten years, program and facility improvements in home economics were among the major accomplishments of the institution. Home Economics programs were redirected, a second cycle self-study report for accreditation was submitted to AHEA and full accreditation was subsequently reaffirmed in 1986. Plans were completed for a new Child Development Center, the Home Economics Building was completely renovated including furnishing and equipment, and the building was rededicated during an official ceremony.[6]

In 1987, Dr. Flossie Byrd became the first Associate Vice- President for Academic Affairs at the University. The College of Home Economics was reorganized into its present structure as a Department within a newly formed College of Applied Sciences and Engineering Technology.

The first male and non-home economist then became Dean of program offerings in home economics, and the first Prairie View home economics alumna, Elizabeth N. Noel, was appointed Interim Department Head of Home Economics.

Today, under the leadership of Dr. Noel as Department Head, home economics at Prairie View fulfills a mission of preparing both men and women to serve the needs of people in various environments and different stages of life as leaders and managers in home economics specialty areas. A central goal of the undergraduate program is to provide a working knowledge of the interrelationship between the environment, consumer needs, resource management, and the social and emotional milieu of the individual and his family. Current undergraduate program offerings include Home Economics Education, Human Nutrition and Food which is approved by ADA under Plan V, Human Development and the Family, and Merchandising and Design.[6]

South Carolina State College established its first Department of Home Economics in 1917 as a separate entity of the College. The Department developed a bachelor of science curriculum in Home Economics Education by 1920, and conferred its first degree seven years later. Teacher education remained the sole thrust of undergraduate programs in the Department until 1959, when a B.S. degree in General Home Economics was initiated. Subsequently, bachelor's programs in Food and Nutrition, and Child Development/Early Childhood Education were added to the curriculum in 1964. These four degree programs remain the curricular offerings of the Department of Home Economics today.[20,27]

Since inception of the first Department, the home economics unit at South Carolina State has undergone several organizational changes. During periods of program growth in the 1930's, 1950's, and 1970's, the Department of Home Economics was reorganized into a School or Division of Home Economics. In 1987, the unit was reorganized again into a Department within the School of Home Economics and Human Services (SHE-HS), the present organizational structure for the home economics unit. In the absence of agriculture at South Carolina State College, SHE-HS has a principal responsibility for the land-grant mission of the college today.[20]

The Department currently has a diverse faculty and student population. The thirteen full-time faculty include males, females, blacks and Asians, as well as individuals of nontraditional educational backgrounds such as veterinary medicine and biochemistry. Male faculty were first employed in the Department in 1974, whites in 1975, and other nonblacks in 1974. The student body includes both sexes, Africans, whites as well as blacks. Males and whites first enrolled in the Department in the 1950's and 1960's, respectively. Food and Nutrition and Child Development have been the chief specializations selected by male students.[20]

The Home Economics unit at South Carolina State has maintained full accreditation by AHEA since 1979. The Food and Nutrition curriculum is a Plan IV/V program, approved by ADA. According to Dr. Willhemia Funchess, Dean of SHE-HE, "maintaining quality educational programs including unit accreditation and program approval by professional societies remains a priority of the Department of Home Economics. Concerns confronting the unit today include restructuring of the general home economics curriculum into a business-oriented program, and providing opportunities for faculty development." Further, future plans of the Department include strengthening program linkages with business, industry and agencies to provide experiential learning opportunities for all majors.

Virginia State University offered its first B.S. degree in home economics in 1923, three years after the institution received land-grant status. The aim of the program was to provide teacher training and its first class graduated in 1926. The degree was offered through an Area or Department of Home Economics, which was added to the Division of Agricultural Education in 1929.[10]

Virginia State was the first 1890 college/university in recent years to change the name of the home economics unit. The name "Home Economics" was first adopted by the University in 1922. Fifty-five years later (1977) the University renamed the unit "Human Ecology." Dr. Julia Miller, then Chair of the unit noted that the name change was made during a time the University was undergoing a reorganization of several schools and departments. Several programmatic changes in home economics had already taken place and students were being prepared for business-related careers in addition to the traditional home economics programs.[28]

Today, the Department of Human Ecology at Virginia State offers B.S. degrees in Home Economics Education and Human Ecology and Business with program options in Foods and Nutrition; Family, Child and Community Services; Management Dietetics; Textiles, Clothing and Merchandising; and the most recent addition, Hotel/Restaurant Management. The undergraduate enrollment of the Department is approximately 185 (head count) students, making it the largest unit among 1890 college/universities. The vast majority of the student population are black, female hotel/restaurant majors.

According to the current mission statement, "the Department of Human Ecology draws its roots from home economics. It is reflective of the application of science for improving man and his environment. Particularly, Human Ecology also focuses on the assimilation of knowledge from the physical, behavioral, biological sciences and the arts to study the interactive and reciprocal effects of the individual, family and near environment. The Department focuses its programs on preparing students to assist individuals and families in sustaining and strengthening growth and development and becoming contributing members of society through interacting with their social, political, economic and physical environment."[10] The current Chair of the Department is Dr. Mary Wyatt, who recently succeeded Dr. Mary McCray.

Throughout its history, the Department of Home Economics/Human Ecology at Virginia State has made several distinguishable accomplishments through its academic programs. The Department was the first unit in the state to establish a Human Ecology and Business program supported by the national organization of Home Economists in Business. It is one of two units among state-supported institutions in Virginia to have a licensed Child Development Laboratory. Within the University, the Department was the first to develop off-campus student teaching centers in secondary schools. Among historically or predominantly black units of Home Economics, the Department at Virginia State established the first chapter of Kappa Omicron Phi National Home Economics Honor Society. The Chapter, Beta Eta, was installed at Virginia State in 1964. The Department maintains scholarships in honor of faculty and alumni to stimulate and support outstanding scholastic achievement among students. Faculty members at Virginia State have been participants in Family Life Seminars Abroad, sponsored through the prestigious International Congress of Home Economics.[10]

Southern University began its first baccalaureate program in Home Economics in 1924, and awarded its first degree in the field to two ladies in 1931. This original degree program had an education focus and was principally designed to prepare vocational home economics teachers and home demonstration agents. Since the first degree, the home economics unit at Southern University has contributed substantially to the development of black teachers and home economists in Louisiana. An estimated 98 percent of black vocational home economics teachers and home demonstration agents in the state are graduates of Southern University.[3]

The home economics program offerings at Southern University expanded and shifted directions in 1944, when baccalaureate programs in Food and Nutrition and Nursery School Education were initiated. ADA first approved the Food and Nutrition curriculum for internship in 1945, and the first graduate to receive an internship was placed at Freedman's Hospital in Washington D.C. in 1951. Throughout the program history, more than 400 graduates have been produced and they have been employed throughout the United States and several foreign countries as administrators, supervisors, and consultants in food services, and as managers of business enterprises. Many graduates have interned at major institutions, have gained membership in ADA, and have served as clinical, administrative, community, and education dietitians. The Food and Nutrition program remains a strong degree area in home economics at Southern University. The program is currently approved by ADA as a Plan IV/V program.[3]

Additional undergraduate programs are currently offered at Southern University in housing and interior decoration, and textiles and clothing. The housing and interiors program was established in 1954 and produced its first graduate in 1961. This program is one of the few of its kind among 1890 colleges/universities. The textiles and clothing program was first initiated in 1963 and produced its first graduate in 1967.[3]

The Home Economics unit at Southern University has undergone several organizational changes over time. The initial Department was reorganized into a Division of Home Economics in 1957. To be consistent with its function in conferring degrees as well as with the University's structure, the unit became a School in 1961, and later a College of Home Economics in 1967. These three changes occurred under the leadership of Miss P.E. Thrift who became the first Dean of the College and was the head of the unit for thirty years (1943–1973). Dean Thrift was succeeded by Dr. Eula Massingale who provided capable leadership to the College from 1973–1986. The Colleges of Home Economics and Agriculture were merged in 1986 to form the College of Agriculture and Home Economics, the present structure of the unit. Dr. Bobby Phills became Dean of the College, the first male and non-home economist in the administrative leadership of home economics programs at Southern. The present organizational structure includes a Coordinator of the Home Economics unit on a two-year rotational basis. This rotating structure is unique for home economics units at 1890 college/universities. Dr. Bernestine McGee became the first Coordinator in 1986, and Dr. Eva Fields is the present Coordinator.[3]

The current mission of the home economics unit at Southern University is to offer programs which address family issues related to child development, interpersonal relationships, food, nutrition, clothing, housing, interior design, and management of human and non-human resources. Efforts are made to develop qualitative skills for personal and professional growth required for men and women to acquire knowledge, experience, and competencies to assume responsibilities for family life, citizenship, and professional careers. The overall aim of academic programs is to minimize the effect of educational and economic deprivation and enhance the quality of life for individuals, families, and communities. Currently the unit has approximately 150 students (head count) enrolled in three departments: (1) Clothing, Textiles, and Related Arts; (2) Family Life; and (3) Human Nutrition and Food. The unit maintains full accreditation by AHEA; an active chapter of Phi Upsilon Omicron Home Economics Honor Society, first established in 1969; and awarded several scholarships annually including the P.E. Thrift Memorial Award, College of Home Economics Awards, Hester D. Richard Award, P.E. Thrift Alpha Kappa Alpha Award, and Phi Omicron Scholarships.

Dr. Eva Fields, reflecting on the past and focusing on the future of the unit, has stated:

> Home economics at Southern University has survived with a very impressive history. The future holds many challenges, much hope and promise. The programs are changing with the times with the great potential of assisting individuals and families to cope with the many problems of everyday living, improve the quality of life and become more productive citizens. Funds are being received to upgrade programs in teaching and research. Recognition of the importance of the service of home economists in assisting individuals and families in improving the quality of life is gaining momentum. The challenges are great but the excitement about what the future holds is very encouraging(3).

Tuskegee University began its first bachelor of science degree in home economics in 1926, and established a School of Home Economics that same year. The School was organized as a unit within the "Teacher's College," which was a part of the "Collegiate Division." In 1915, Tuskegee expanded its original mission of teacher training to include trade and industry, and vocational teacher training became a major thrust of instruction at the institution. The original degree program in home economics was developed to support this expanded mission of that time. Tuskegee awarded the first B.S. degree in home economics in 1930.[5]

Home economics academic programs have remained an integral part of the mission of Tuskegee since first instruction in the field was initiated. Along with Agriculture, instruction in Home Economics has been a "centerpiece" of Tuskegee's historic educational programs, which have gained national and international recognition.[14]

Today, the resident instruction mission of home economics is carried out by the Department of Home Economics which offers B.S. degree programs in Clothing and Related Arts, Food and Nutritional Science, General Dietetics, and Hospitality Management. The Department functions as a unit within the School of Agriculture and Home Economics (SAH). This most recent reorganization of the land-grant units took place in 1987, when the academic programs as well as the research and Extension programs in agriculture at Tuskegee were pulled together under one administrative head, the Dean of SAH. Dr. Walter Hill is the first and current Dean of the re-organized unit, and Dr. Ralphenia Pace is the first Assistant Dean of Academic Affairs and Chair of the Department of Home Economics under this new structure. According to the administration at Tuskegee, this new structure of programs is designed to address major local, state, national, and international issues and changing priorities in home economics and agriculture through an interdisciplinary and integrated approach to problem-solving.[29]

Over the years, the Home Economics unit at Tuskegee has produced about 80 percent of the black dietitians in the United States, and has been a major source of black vocational home economics teachers for Alabama and southern states. The Hospitality Management and Clothing and Related Arts programs have produced graduates who are making outstanding contributions through managerial, administrative and other leadership roles in these fields. The international reputation of the institution has been advanced through the international training and research programs in home economics, especially in the food and nutrition areas.[5]

Tennessee State University began offering a baccalaureate program in Home Economics Education in 1926, and awarded its first B.S. degree in that major to eleven women in 1930. Home Economics Education remained the only B.S. program offered in the field until 1944, when a General Home Economics degree was initiated with options in Food and Nutrition, Clothing and Textiles, Food Service Management, and Child Development and Family Relationships.[20] With this growth in specializations, Tennessee State became a pioneer among 1890 colleges/universities in offering undergraduate programs in diverse home economics disciplines. Program offerings expanded further in the 1970's with the initiation of a degree in Early Childhood Education, which was administered jointly by the Departments of Home Economics and Education. Most recently in 1984, a Fashion Merchandising program was added to curricular offerings.[19]

Today, Tennessee State maintains all degree programs options in home economics that have been initiated since 1926. Additionally, the institution currently offers an Associate Degree in Early Childhood and Child Development as well as minors in food and nutrition and related art. A central purpose of the undergraduate programs is "to provide both a liberal and specialized education in which the interests and well-being of individuals, family members, and consumers are significant."[30]

Since inception, the administrative designation of the home economics unit at Tennessee State has evolved from a Department of Home Economics in 1912, to a Division of Home Economics in 1944, a period of rapid program growth, to a Division within the School of Arts and Sciences in 1958, and finally, to its present designation as the Department of Home Economics within the School of Agriculture and Home Economics. The mission of the Department today is to prepare individuals of diverse academic and social backgrounds and ages for graduate and professional specialization and for leadership roles in improving quality of life for families through education, research, prevention, development, and community service.[19]

The Department at Tennessee State has one of the largest undergraduate student enrollments in home economics among 1890 colleges/universities, ranging from approximately 140 to 180 students (head count) over the previous five years. Enrollment of the Department peaked in 1979 at more than 300 students. While the student body is predominantly black and female at present, whites and other ethnic groups have enrolled in the Department since 1970, and males were first enrolled in 1967. Early Childhood Education and Clothing, Textiles, and Merchandising have had the highest student enrollments within the last five years, and male students have chiefly entered the Clothing, Textiles and Merchandising program.[19]

The Home Economics unit at Tennessee State was first accredited by AHEA in 1973 and accreditation has been maintained since that date. According to Dr. Gearldean Johnson, Head of the Department, major issues and priorities confronting the Department today include student recruitment and retention, professional development of faculty, cooperation/linkages with related businesses and governmental agencies, and facility enhancement.[19]

The University of Arkansas at Pine Bluff (UAPB) initiated its first four-year curriculum in Home Economics and began construction of the first Home Economics building in 1929. Additionally, that same year, the University's role as a four- year degree-granting institution was restored after having operated as a junior college for the previous 35 years.[14] The original four-year curriculum in home economics led to a B.S. degree in Home Economics Education. The degree program remained the sole curricular thrust in home economics until 1957, when a bachelor's degree in Institutional Dietetics was added to the curriculum. Program expansion continued in the 1960's with the addition of a major in Clothing, Textiles, and Related Arts (CTRA) in 1967, followed by a major in Child Development in 1969.[9]

Decades of the 1970's and 1980's marked an era of program redirection and enhancement in home economics at UAPB. Perhaps more than any other time, decision made during that period lead to the programmatic thrusts of home economics today at the institution. Construction of the current Home Economics building, Adair Hall, was completed in 1976–77. This facility contains one of the most modern and fully equipped textile testing laboratories among 1890 colleges/universities. During the early to mid-1970's, the Institutional Dietetics major was redirected to the current Food, Nutrition and Dietetics program, and approval of this program by ADA was attained first in 1980 and is maintained today. In 1981, the CTRA program was redirected to the Fashion Merchandising degree which is offered today. During that same year home economics courses became incorporated into the general education requirements of the University, which expanded the visibility, productivity, and educational outcomes of the unit. By this time, a strong faculty in home economics specializations had been developed and the unit became fully accredited by AHEA in 1982 and remains accredited today. The most recent curriculum development took place in 1988 when a program option in Food Service/Restaurant Management was added to the Food, Nutrition and Dietetics major.[9]

Several organizational developments have occurred over the history of home economics at UAPB. A School of Home Economics was established in 1929 when the first degree program was initiated. This unit was a separate entity of the University. In 1963, the unit was reorganized into a Department of Home Economics within the Division of Agriculture and Technology. During the early 1980's, the vocational educational programs of the University were reorganized, and home economics education became a part of the newly created Department of Vocational Education which is currently in the School of Education. Also during that period, the visibility of Home Economics was enhanced when the Division of Agriculture and Technology was renamed the Division of Agriculture, Home Economics, and Technology (AHET). In 1987 the Division of AHET was renamed the School of AHET.

Home Economics at UAPB was under the strong leadership of Dr. Phyllis Greenhouse from 1957 to 1983. Currently, the Department is headed by Dr. Edith Neal. According to the current mission statement, the Department aims to offer programs that will prepare individuals to function as professionals within the environment of which they are a part. The Department's primary commitment is to strengthen the individual, the family unit, and the home through relevant educational experiences, application of research findings and community service programs. The Home Economics unit is committed to outreach and interdisciplinary programming designed to provide solutions to individual and family problems and to provide leadership and support in the interest of the community and special groups. The Department encourages students "to develop a spirit of inquiry and a sense of self-direction."[9]

Fort Valley State College became a part of the University system in Georgia in 1931. The original mission of the College was to develop an integrated program in home economics, arts and crafts, agriculture and the vocational trades. Interestingly, the first freshman class consisted of twelve young ladies who expressed a strong desire for home economics, and thus, a separate home economics course was developed and offered on a regular basis since 1931.[31]

With continued growth and interest in home economics, the first Division of Home Economics was established at the College in 1939, and a teacher education program was developed the next year. The mission of that program was to prepare efficient teachers and improve human welfare. In 1941, the first class of nine students was awarded the B.S. degree in Home Economics Education.[31] In the fall of 1942, an arts component was added to the home economics program, and the Division of Home Economics offered concentrations in both education and arts for the next six years. During that period, a student Home Economics club was organized. The first home management residence, known as the "Third Family Cooperative Unit," was ready for occupancy in 1942, and a Nursery School was added in 1945.[3,31]

Beginning in 1948, the year Fort Valley College was designated as a land-grant institution, education and vocation became major emphases of curriculum at the institution. All programs began to focus on teaching, except for the vocational programs, which were designed for students interested in self-employment. The vocational program in home economics aimed specifically to prepare individuals for organizing and managing day nurseries, home bakeries, cafeterias, flower shops, drapery shops, and dress and tailoring shops.[31]

Home Economics enrollment at Fort Valley grew steadily during the 1950's and reached its peak of 109 students in 1975. During that period, emphasis in programs shifted from that of quantity and efficiency of production to that of concern for quality of human life. The current Home Economics Building, Henretta Walden Meyers Hall, was erected in 1965, to accommodate growing student interests.[31] The year 1966 marked a re-direction of programs for the Division. A Food and Nutrition degree was approved in 1967, which was the first new degree program in home economics since the 1940's. Most recently, a B.S. degree in Infant and Child Development was added in 1978. These two programs along with Home Economics Education are the undergraduate offerings in home economics at Fort Valley today.

Fort Valley currently offers the only undergraduate program in Infant and Child Development in the state of Georgia. The preschool program serves as a model for other similar programs throughout the area.[8] Each major offered by the unit has a common discipline requirement which includes home economics, food and nutrition, and infant and child development. All degree programs offered are accredited or approved by the appropriate professional society, and the Home Economics unit has been fully accredited by AHEA since 1982.[8,31]

Since inception as a Division, the Home Economics unit was reorganized in 1985 into its present structure, a Department within the School of Agriculture and Home Economics. In reflecting on major accomplishments of the unit over the years, Dr. Dorothy Conteh, current Chair of the Department, observed that in addition to the provision of quality programs, the Home Economics unit has prepared most black professional home economists in Georgia. Graduates have become recognized as educators and business persons in their communities, and are employed in leadership positions by major businesses and industries throughout the southeast region of the country. Additionally, the Home Economics unit has been a "pace setter" at the institution in international development activities. The Department initiated the first study abroad program at the institution in 1988 with five student participants. Similarly, the first Fulbright-Hays program grant at the institution was received by the Department of Home Economics. The grant focused on the original purpose of the unit, that of training efficient teachers and improving human welfare.[8]

Today, the mission of the Department of Home Economics at Fort Valley embraces a comprehensive philosophy of the profession. The Department aims to prepare professional home economists who demonstrate the fundamental personal and intellectual competence necessary for meeting challenges and needs of individual families and the global society. Programs are designed to promote professional growth and to develop general, specialized and professional competencies in home economics.[8]

North Carolina A&T State University established its first Department of Home Economics in 1932. A bachelor of science degree in home economics was initiated that same year, and the first class graduated from the program in 1935.[32]

Today, the Department of Home Economics, housed within the School of Agriculture at A&T, is the only home economics unit at a land-grant university in North Carolina. The Department maintains an undergraduate degree in home economics, which has been expanded over the years to include major options in home economics education, child development, clothing and fashion merchandising, foods and nutrition, and dietetics. In 1975, the Department began a B.S. degree in food science, the only undergraduate program of its kind in home economics units at 1890 colleges/universities. Additionally, the Department has operated an Associate Training Program in Child Development since 1985. This program prepares twenty to twenty-five students annually to meet educational standards for CDA certification which is required in North Carolina for individuals to work with preschool children in day care centers. Students in this program have included high school graduates as well as persons who have advanced degrees. The program is national in scope and uniquely carries training to the student's work site.[32]

According to the current mission statement for the Department, undergraduate programs in home economics at A&T focus on the family system, its environment and interrelationships with prevailing social, economic, ecological, ethical and political aspects of society. A primary goal of the Department is to develop in students a holistic perspective for improving family well-being and quality of living.[32]

The Home Economics unit at A&T has been accredited by AHEA since 1984, and the dietetics program is approved by ADA as a Plan IV/V. Undergraduate enrollment currently exceeds one hundred students, making the unit one of the largest among 1890 colleges/universities. The Department still enrolls mostly black females, although whites, other racial groups, and males are enrolled. Dr. Harold Mazyck, Chairman of the Department, is the first male known to head a home economics unit at 1890 college/universities, and is the only black known to have earned the Ph.D. in home economics from the University of North Carolina at Greensboro.[22,32]

Delaware State College established its first four-year curriculum leading to a bachelor's degree in home economics in 1933.[13] The program was one of the original bachelor's programs offered by the institution.[14] The first B.S. degree in home economics was awarded to one graduate in 1934. This degree was granted through the Area of Home Economics, which was one of five academic program units of the College at that time.[15]

Similar to other academic programs of Delaware State, the home economics unit has undergone several organizational changes over time. Today the unit is designated as the Department of Home Economics, one of twenty academic departments of the University.[14] The Department is located in a multipurpose facility constructed in 1967 to accommodate the Departments of Home Economics, Economics, and Business Administration.

Today, the Department of Home Economics at Delaware offers program options in General Home Economics; Food, Nutrition, and Dietetics; Clothing and Textiles, and Child Development and Human Relations, which in all cases originated in 1937. Other programs include Housing and Home Furnishings, first developed in 1943; Consumer Affairs/Studies, first developed in 1977; Fashion Merchandising, first developed in 1979; and Hotel Restaurant Management, developed in 1988. The mission of the unit is threefold: (1) to provide quality programs in teaching, research and service at an affordable cost for the citizens of Delaware and other states; (2) to assist students in developing into well- adjusted, productive and contributing citizens in this global society; (3) to assist students in developing competencies for professional careers in home economics and for assuming leadership roles.[13] The current faculty of one part-time and six full-time members is diverse with respect to gender, race, and educational background. Males first joined the faculty in 1978.

Similar to other home economics units in higher education, several issues and concerns confront the Department at Delaware State today. According to Dr. Eva Adams, Department Chair, major concerns of the unit include the ability to attract and retain strong faculty in all program areas, image building, adequate funding, and designing curricula to serve a diverse student population and to prepare students for non-traditional careers and for international service.[13]

The University of Maryland-Eastern Shore (UMES) began baccalaureate programs in the home economics field in 1936, when degree programs were initiated in both Home Economics Education and General Home Economics. In 1938, the institution awarded its first bachelor's degree in the field, a B.S. in home economics education.[21]

Programs in general home economics and home economics education continued to develop over time at UMES. Major options in dietetics and fashion merchandising/textiles were initiated in 1978 and 1983, respectively. Today, additional major options in food service management and nutrition are offered as well as minor programs in human development and clothing and textiles. A principal aim of curriculum is to integrate concepts across disciplines and to provide an educational background for improving living conditions, goods, and services of families from a global perspective.[21,33]

Since 1981, the home economics unit at UMES has been known as the Department of Human Ecology, which is organized within the School of Agricultural Sciences. The Department is currently headed by Dr. Retia Scott Walker, a graduate of Tuskegee University. The mission of the Department is to prepare students for leadership, advanced study, and careers which combine the scientific and human approach to problem solving and improving life quality. The central core of curricula is the family ecosystem, that is, "the study of reciprocal relations of the family to its natural and man made environments."[33]

An historic costume collection, established in 1986, is among the special features of the Department of Human Ecology at UMES. This collection, valued at $53,000 was developed by private and institutional donations. Additionally, the Department houses the largest campus collection of resources in Gerontology and Women in Development. The Department is one of the few units among 1890 college/universities to maintain a textile testing laboratory, established in 1986 for teaching and research purposes. Other features of the unit include an Early Childhood Center established in the 1970's to serve as laboratory for home economics as well as education majors; a computer laboratory, established in 1987 for institution and research; and organized student clubs including honor societies in home economics.

With respect to the remaining 1890 institutions, home economics programs are offered at Langston University and Lincoln University. However, home economics has been discontinued at Florida A&M University.

At Langston, the name "Home Economics" was first adopted in 1924. Home Economics degree programs are currently offered through the Department of Home Economics, which is organized in the Division of Applied Sciences. Dr. Ramona Kellam is the Chair of the Department. Five undergraduate programs are currently offered by the Department: early childhood development, general home economics, vocational home economics education, general home economics education, and nutrition and dietetics. The principal goals of the Department are (1) to improve rural and urban life through home economics programs, and (2) to provide education for a dual role of successful family life and a professional career.

At Lincoln University, home economics is currently a part of the Department of Agriculture, Natural Resources, and Home Economics. Dr. Dianne Killian is the head of that unit.

When Florida A&M University (FAMU) became a land-grant institution in 1891, its teacher training program already contained some courses in domestic science and domestic arts. However, it was under the administration of President Nathan B. Young that home economics as a major leading to the bachelor's degree became a reality. The movement toward a four-year, standard degree in home economics began in 1912 with Ms. Evalena A. Davis as director, assisted by Ms. Ellen O. Paige who was in charge of dressmaking and military science. During the same year, the Home Economic Department moved into a new spacious building and began developing its collegiate programs.

The FAMU Catalog, 1915–16 is the first publication showing programs of study leading to the bachelor's degree in home economics: Home Economics, which placed emphasis on the sciences, and Home Economics for Teachers which emphasized more of the liberal arts and teacher training courses. Although the programs were distinctly different, both indicated that the aim was "to train teachers of domestic science and domestic arts" for the public schools of the State.

During the 1920's and 1930's, Miss Ellen Paige assumed the leadership of the Department of Home Economics. It was under her administration that the department began emphasizing just one curriculum, Vocational Home Economics. So when Mrs. Genevieve J. W. Thomas became dean of Home Economics at FAMU in 1946, there was just one curriculum which was designed to prepare students as teachers. Mrs. Thomas was in charge of home economics from 1946–1958 initially, and came back on an interim basis from 1975–77. With new professional opportunities emerging for students beyond the teaching profession, Dean Thomas saw the need for curriculum revision and expansion. After an exhaustive study, the curriculum was expanded to offer majors leading to the B.S. degree in: Clothing and Textiles, Food and Nutrition and Vocational Home Economics.

Even with the new majors, Home Economics Education remained the most popular throughout the 1950's. However, because of the low turn-over of black teachers in the public schools of Florida, and with the merger and abolition of many black schools during the desegregation/integration struggle, it became difficult for FAMU teachers to find jobs in the State. Thus, a noticeable decline in enrollment occurred from year to year.

In 1953, the same year that FAMU was elevated to university status, funds were appropriated for a new building, Perry-Paige Building, to be shared by agriculture and home economics. The new building was one of the most modern, state-of-the-art facilities to be found on 1890 campuses. With new facilities and equipment, changes were made in the curriculum to include: Clothing and Retailing; Food, Nutrition and Institutional Management; Home, Family and Community Services; and Vocational Home Economics Education. As enrollment declines became more apparent in both agriculture and home economics in the 1980's, agriculture and home economics were combined into the School of Agriculture and Home Economics. So in 1957, the Dean of Home Economics position was reduced to Director. Upon the retirement of Mrs. Thomas in 1958, Dr. Clinita A. Ford, the holder of the Ph.D. degree from Kansas State University, became the director. Her tenure came when the colleges and universities across the nation were struggling with the idea of changing "home economics" to a more appealing name. Thus, at FAMU the name was changed to the Division of Consumer Science and Technology. Also, in 1958, FAMU began offering graduate degrees leading to the Master of Education or the Master of Science.

FAMU's programs in Clothing and Retailing and Food, Nutrition and Institutional Management showed considerable growth in the 1960's and 1970's; however, by 1977 the overall enrollment had fallen to a very low level. Taking advantage of low enrollment, the high economic cost of operation, and the demands of the federal government that Southern states reduce program duplication and establish unitary systems in higher education, the Florida Board of Regents transferred the Division of Consumer Science and Technology to nearby Florida State University in 1978. Alumni and friends of FAMU reacted with loud and angry protest but to no avail. At the time of the transfer of the 138 students enrolled in the program, all faculty members were also given the option of transferring without any disabilities. Although FAMU maintained a few courses in nutrition, home economics training effectively came to an end at FAMU in the fall of 1978.[85]

The highest level of graduate instruction offered by Home Economics units at 1890 colleges/universities is the master's degree. At some institutions, the master's program in Home Economics Education is currently offered by the School/College of Education, although the program may have originated within Home Economics units. This discussion is limited to an historical overview of programs which are currently offered by units of Home Economics.

The earliest record of a graduate program in home economics dates back to 1938, when Prairie View A&M initiated a master's degree in General Home Economics.[6] Today, curricula leading to a degree or endorsement in Home Economics and Home Economics Education are most frequently offered at most 1890 institutions. Tennessee State began its program in 1944;[19] South Carolina State initiated programs in 1950 and 1952;[20] Alabama A&M initiated a program in 1970;[4] and Alcorn State University began a program endorsement in 1974.[25]

Tuskegee University, North Carolina A&T, and South Carolina State Colleges are the only 1890 institutions to offer degree programs in specialized areas. Tuskegee University offers a Food and Nutritional Science program which has produced a significant number of master's graduates, and 80 percent of them have earned the Ph.D.[5] North Carolina A&T began a Food Science and Nutrition program in 1968, and graduated its first class by 1971.[32] South Carolina State College offers the most extensive master's level instruction among 1890 institutions. It is the only 1890 institution to offer a program in Individual and Family Development, which was initiated in 1970, and in Child Development, which was initiated in 1984. Additionally, South Carolina State has offered a Food and Nutrition program since 1975.[20]

Home economics research at 1890 colleges/universities began for the most part in Fiscal Year (FY) 1967 or thereafter with formula funds from the U.S. Department of Agriculture (USDA), administered through the Cooperative State Research Service (CSRS). This beginning of home economics research is similar to that for other agricultural disciplines at 1890 institutions. Although the 1890 colleges/universities were created with a threefold mission of teaching, research and Extension, few state legislatures appropriated research funds to these institutions.[34] Thus, with few exceptions, sponsored research for agricultural issues, including home economics, was lacking until FY 1967 when formula -funds were first made available through CSRS for agricultural research at 1890 colleges/universities.

Prior to 1967, research in home economics is known to have been conducted at Tuskegee University, Prairie View A&M, Southern University, and North Carolina A&T.[3,5,6,33] These early studies were conducted during the 1940's and 1950's, and they focused on problem areas in three disciplines: food, human nutrition, and clothing.

Tuskegee University conducted the most extensive research program during that period. Tuskegee initiated seven projects which were inclusive of all three disciplines of home economics research during that time. The earliest project began in 1944 with a study of selected clothing practices among groups of home economics students at Tuskegee. That project, conducted by Geraldine R. Hastings, placed special emphasis on clothing practices and implications for consumer education. Other research in clothing was initiated. In 1948, Pauline M. Anderson compared the usage of homemade garments with that of purchased ready-made clothing. Comparisons included construction quality, clothing inventory, type of garment, and cost. Later in 1950, Annie Ruth Henderson Jackson evaluated the clothing curriculum at Tuskegee through a study of practice teaching activities of home economics students.

Additionally, the origin of Tuskegee's strong tradition in human nutrition research may be traced to the 1940's. In 1945, Jaunita E. Apperwhite studied the dietary habits of 150 black families in Macon

County of Alabama. The following year, a similar study of the dietary patterns of black pregnant women was initiated by Sara T. Hudson. Later in the 1950's, research foci expanded as studies conducted by Gracie L. Bell and Susie L. Haire began to assess the role of nutrition education in health promotion, and the relationship of medical, social, and dietary factors to nutrition status. As a result of these studies, nutrition education was introduced to lower elementary grade children, and basic information was obtained on the role of indigenous southern foods in improving nutritional status.[5]

Early studies at other institutions commonly focused on food and human nutrition. In 1946, the Texas Agricultural Experiment Station funded joint research projects with Prairie View A&M, which began dietary and nutrient intake studies as well as studies of the durability, launderability, and appearance of selected cotton fabrics.[6] Similar dietary studies were initiated by P. E. Thrift and R. B. Ward at Southern University in 1949, which involved 500 black families in Scotlandville, Louisiana. The Carnegie Grants-in-Aid Committee awarded $450 to the Department of Home Economics to conduct this work.[3] The final project of this period was conducted at North Carolina A&T in 1956. The National Institutes of Health funded an investigation of the utilization of methionine in adult rats. This research was the first nationally funded project at A&T, as well as the first basic research in home economics known to be conducted at 1890 colleges/universities. These early studies served to encourage research development in home economics at 1890 colleges/universities, and provided the foundation for the basic philosophy of home economics research at these institutions today—that of improving quality of well-being of people, particularly blacks, limited-resource, and under-served individuals and families at risk.

In FY 1967, formula-funding for 1890 Agricultural Research Programs was made available by the USDA/CSRS. This source of funding served to attract scientists with a research interest in home economics issues and to develop home economics research capability at 1890 colleges/universities. Formula-funded research in home economics has been conducted as an integral part of the 1890 Agricultural Research Program, which is administered at each institution by a Research Director. Historically, Research Directors have been males with a non-home economics background. The role of the Home Economics unit administrators in establishing research and funding priorities as well as in administering home economics research has varied among 1890 institutions. Similarly, the support for home economics research has also varied. Although an analysis of financial support is beyond the scope of this chapter, human nutrition research has historically received the best support among the home economics disciplines at 1890 institutions. Driskell and Myers,[35] recently summarized the funding patterns of human nutrition research at State Agricultural Experiment Stations and 1890 Agricultural Research Programs for FYs 1970–86. Glover[36] provided data on the relative funding of human nutrition research at 1890 colleges/universities, and also noted that human nutrition was one of the nine priority areas for future research at 1890 institutions.

The following discussion provides an historical overview of USDA/CSRS formula-funded research performed by Home Economics units, and thus represents only a partial accounting of research on home economics issues conducted at 1890 colleges/universities. Departments or units such as Food Science, Biochemistry, Rural Sociology, the Carver Foundation and Animal Science, for example, perform research on problem areas within the broad scope of home economics. Also, home economics scientists have attracted research funding from other agencies such as the National Institutes of Health, U.S. Agency for International Development (USAID), state agencies, and private industry. This work is available for only a few institutions. Nevertheless, as in other disciplines, the USDA/CSRS has been the primary funding agency and in many cases the sole funding agency of home economics research at 1890 colleges/universities.

During FYs 1967–69, an early period of formula-funding for 1890 agricultural research, home economics projects were initiated at several institutions, including Kentucky State, Langston University, Tennessee State, and Alcorn.[7,11,19,25] Human nutrition research is known to have been initiated at Fort Valley and North Carolina A&T as well.[36] It should be noted that Tuskegee University was excluded from formula-funding during this period because Tuskegee is not a land-grant institution, and thus was ineligible by law. However, Tuskegee has been included in formula-funding since 1972, when the Presidents and Chancellors of the sixteen 1890 (land-grant) institutions agreed to relinquish 1/16th of the grant for each institution to permit the funding of Tuskegee.[34] The early projects (conducted FYs 1967-69) represented chiefly applied research issues and focused on problems of rural families, black families, low-income and limited resource groups. Focus on these target groups was consistent with the philosophy and overall goals of 1890 Agricultural Research Programs at that time. Studies conducted provided a description of the level of living, home management practices, financial problems, and food consumption and expenditure patterns of black families. An investigation conducted in clothing identified the relation of social and behavioral characteristics to the selection and care of clothing by rural disadvantaged high school students. Other studies involved basic research in nutrition. Findings demonstrated the effects of trace minerals on human development and the relationship of calcium and plant protein intakes to the biological utilization of calcium, protein and other nutrients.

During the last twenty years, formula-funded research in home economics has expanded considerably with respect to both institutional involvement and the scope of studies conducted. As may be expected, studies have varied widely among institutions, and in most cases, within the same institution. The following discussion illustrates examples of the nature and scope of research performed by scientists in home economics units.

At Alabama A&M, researchers during the 1970's studied food preferences of preschool children, determined the educational aspirations of low-income youth, and identified problems in garment fit along with effective solutions. In the 1980's, further studies in clothing determined the relationship between clothing quality, fit, and style to garment purchases. A unique study among 1890 institutions in progress now at A&M examines the perceptions of female consumers with respect to domestic and imported ready-to-wear garments. Also, ongoing research is designed to determine the clothing as well as nutritional and housing status of rural elderly men and women in Alabama.[4]

At Prairie View, human nutrition research was given priority in the 1970's. Need assessment, tri-county surveys and other investigations determined critical nutritional problems and status of various population groups, and delineated bibliographic and data information services related to human nutrition. Other studies assessed the living patterns of disadvantaged families. In the 1980's, researchers began to examine the impact of the economic environment upon resource management of low-income single parent families. With an emphasis on public policy issues, economic shifts and their influence on well-being, these studies were unique among 1890 institutions. Similarly, other more recent studies uniquely focused on disabled families and determined the impact of disability on family relationships, behavior and family roles, as well as on biological and social interactions of the living environment. Ongoing evaluations are designed to determine the quality of well-being of rural elderly populations in Texas.[6]

At Fort Valley College, home economics research focused on three problem areas during the seventies: (1) soybean usage as meat protein supplements, (2) purchasing priorities of food stamp recipients, and (3) opinions regarding divorce and mate selection of various groups. In the eighties, researchers developed alternative convenience uses of sweet potato roots and leaves, determined eating problems of minority teenagers in Georgia, and assessed the parenting skills of middle-Georgia families. Ongoing studies aim to assess health related practices of females and the well-being of rural elderly groups.[8]

Researchers at UAPB have undertaken studies in housing, textiles, clothing, food and human nutrition during the previous two decades. As one of the 1890 institutions to conduct extensive housing research, UAPB's studies have focused particularly on housing issues relevant to rural and low-income people and have provided information of state, regional, and national significance. Specific studies have examined housing barriers, alternatives and assessment criteria as well as home loan policies and procedures for economically depressed and rural residents. Additionally, UAPB is among the few 1890 institutions to be engaged in textiles research in recent years. Studies of textile properties such as launderability, comfort, performance, colorfastness, and protection have been emphasized. Nutritional studies have involved both dietary and biochemical assessment of the nutritional health of high risk groups, including adolescent females, the aged poor, and rural elderly groups. Other studies in the area of gerontology determined pre- and post-retirement activities and the quality of well-being of older adults. Studies in foods provided sensory and objective information on the eating quality, palatability and consumer acceptance of domestic rabbit meat under various cooking conditions. Other studies involved freshman students at UAPB and determined their perceptions of clothing and appearance and the effects of family orientation on personal characteristics.[9]

Research at Virginia State has focused primarily on rural, adolescent female, and elderly populations. Studies of the food habits and nutritional health of elderly groups were conducted in the 1970's, and similar work is in progress today. Current investigations, however, include problem areas in housing, clothing, and quality of life. Studies involving adolescent females have provided information on food habits, biochemical parameters of nutritional status as well as on the social, cultural, economic and other factors influencing nutritional health in this age group. Other formula-funded research has helped to establish counseling services needed by rural homeowners. Additionally, special projects conducted by faculty/researchers have been supported by other funding sources. International work, sponsored by the Bureau of Economic Research Development (BERD/USAID), examined Ghana's home extension programs. The Virginia State Department of Education supported work designed to establish means to meet needs of handicapped, disadvantaged students, and to develop competency-based modules for consumer education.[10]

Scientists at Tennessee State University focused in the 1970's on problem areas in clothing, nutrition, and human resource management. Studies examined behavioral modification and other multitechniques as approaches to dietary changes; the launderability of synthetic, suedelike fabrics; and techniques for consumer resource management. Later during the eighties, further investigations were directed principally toward problem areas in food and human nutrition. Scientists developed new home uses for sweet potato products, determined the impact of the food stamp program on dietary improvements and other conditions, and demonstrated that chronic medical problems and stressful life events were key determinants of psychological well-being. Studies in progress today aim to assess the nutritional attitudes and knowledge of middle-age women, as well as the quality of well-being of rural elderly groups.[19]

Research at South Carolina State has played a major role in determining the nutritional health of groups at risk in South Carolina. In the 1970's, nutritional status assessments were completed for adolescent girls, rural people, school-age children, and later in the 1980's, dietary evaluations of rural elderly groups were accomplished. Additional work, funded by the state agencies in South Carolina during the previous two decades, focused on problems in human resource development, academic achievement, and career aspirations of children and college students. These studies provided useful information for the development of effective home intervention strategies to improve achievement of rural head start children, contributed insight for individuals and groups to define and achieve goals as a process of human development, and provided comparative data on career orientation of home economics majors at South Carolina State. More recent formula-funded research, however, examined the parenting skills of limited-resource teenage mothers, including their knowledge of parenting roles and infant and child development. These studies further determined the influence of other factors on the parenting practices of this group. Ongoing research is designed to assess housing, clothing, and dietary factors as determinants of well-being of rural elderly groups.[20]

Studies conducted at the UMES during the 1970's focused mainly on factors influencing learning and cognitive development of various groups. These studies applied electrophysiological techniques to evaluate learning, and the psychosocial and cognitive development of children in rural and urban areas. Other studies examined the influence of race and social factors on preschool learning, and evaluated in Maryland rating properties and other characteristics of the Winged bean (a variety commonly produced and consumed in India). In the 1980's, research expanded and was directed toward problems in aging, clothing, and merchandising, food science, nutrition, and consumer management. Studies examined the quality of well-being of rural elderly groups, compared long-term care policies of elderly populations living in the United States with those of three Western European countries, and employed an intergenerational approach to identify the perceptions of aging by various groups. Dietary surveys described the food intake and dietary status of low-income women and preschool children, and biochemical studies were undertaken to determine the protein quality of soybean and soy germ plasm. One very interesting investigation in clothing determined the effectiveness of clothing design and care in reducing pesticide exposure of applicators, while others funded through the institution were designed to assess the effectiveness of merchandising programs in fulfilling needs of related industry.[21]

Research at Alcorn State University during the previous two decades has focused chiefly on improving the dietary and nutritional health practices of vulnerable groups in Mississippi. Through comprehensive nutrition surveys conducted during the 1970's, scientists uniquely contributed a database on food habits and nutritional knowledge, attitudes and status of low-income households, blacks, children, adolescent and elderly groups in southwest Mississippi. Further, studies documented the incidence of diet-related disorders as well as social, demographic, economic and other factors influencing the nutritional health of these groups. Other studies involved an assessment of the basic human needs of low-income rural families using a multidisciplinary approach, including housing, transportation, health, dietary, and other issues. Also, researchers developed household and institutional recipes using catfish or crawfish as the predominant ingredient, and evaluated their sensory and qualitative properties. These studies provided alternative uses of catfish and crawfish by consumers and contributed to the establishment of these industries in Mississippi. During the 1980's, basic research was emphasized which advanced the understanding of the role of dietary components in the modulation of indices of prevalent disorders in southwest Mississippi, including hypertension, diabetes, cancer, and cardiovascular disease. Investigations on the effect of edible gums on risk factors in cardiovascular disease and diabetes have been of particular interest at state and national levels in recent years.[25]

Research at North Carolina A&T has included studies in housing, nutrition, food science and textiles. Housing research at A&T has emerged as a well-established, comprehensive program during the last ten years. Studies have helped determine feasible housing alternatives for low- and moderate-income groups and documented incentives as well as constraints to affordable housing. Other studies in housing have focused on energy conservation practices and techniques, their effect on lifestyles, and the impact of environmental controls on thermal comfort and air quality. Still other studies have dealt with issues in manufactured housing, weatherization techniques, and the application of automation technologies to residences. Nutrition research has documented the status and health relationships of trace minerals, including selenium, copper, chromium, and zinc. Studies in other problem areas have determined the effect of feeding dried poultry waste on turkey growth, examined marketing and economic problems related to textile products and their use by rural farm families, and determined oxidative processes in relation to alcohol production in freeze dried meats. Additionally, other recent and ongoing projects are designed to determine selected nutrient values of foods under various processing conditions. These studies will provide total fat and omega-3-fatty acid contents for commercially cultured fish, as well as ascorbic acid, thiamin and selected mineral values for frozen and canned vegetables cooked by microwaves.[32]

Kentucky State University emerged as a leading 1890 institution in human nutrition during the early 1970's,[36] and scientists have maintained a strong tradition of research productivity at state and national levels. Scientists employed a multidisciplinary approach to the surveillance of subclinical malnutrition and related food habits and biochemical indices of malnutrition to biological, economical, psychological, sociological as well as business parameters. Studies have documented the nutritional status of populations at risk including low-income elderly groups and teenagers. Other studies have focused on the relation of dietary patterns and components to the prevalence and metabolic indices of obesity and chronic diseases.

Researchers at Tuskegee University during the previous two decades conducted studies on a range of problem areas in the food and nutritional sciences, including food quality, safety and preservation, food product development, nutrient metabolism and bioavailability, and nutritional health in relation to disease. Studies determined the influence of environmental pollutants on the quality and safety of meat, milk, and eggs produced by limited-resource farmers. Considerable work was directed toward the nutrient composition and health benefits of sweet potato green tips and roots. These studies characterized the properties of sweet potato proteins and the effect of protein content on mineral bioavailability. Further, these studies demonstrated that the predominant fatty acid in sweet potato green tips was the omega-3-fatty acid, which is protective in the onset of coronary disease. Other sweet potato research identified procedures for the use of gamma radiation in preservation of the product. Additionally, research in nutrition was designed to determine the effect of nutritional status on academic performance, and assess the nutritional health of adolescent females. Researchers have successfully attracted funds during the last ten years from a range of sources in addition to USDA/CSRS. International research, sponsored by USAID, evaluated indigenous food preservation techniques in Ghana and their effects on nutrient quality. Gerber Foods supported evaluations of the cultural and nutritional aspects of sweet potatoes. Health and Human Services funded research designed to study the effects of zinc deficiency on DNA polymerase activity using an animal model. These studies at Tuskegee have contributed both basic and applied insight for solving problems of state, national and international significance. In focusing on the future of home economics research in food and nutrition, Dr. Ralphenia Pace, a research nutritionist and Head of Home Economics at Tuskegee stated:[37]

> Current research shows the need for food and nutrition scientists to expand their focus to deal more directly with food and nutrition problems in rural communities as well as with the growing population of elderly people in those communities. While nutrition problems in rural and urban settings are similar, the reasons for such problems are often times quite different. In addition to coronary heart disease, diabetes, obesity and other chronic disorders that affect both the rural and urban inhabitants, problems associated with access and resource limitations compound the diet and health concerns of rural people. As a result, while some urban nutrition problems may be improving, rural ones continue to worsen. Furthermore, for Americans in general, the problems of and solution to obesity and over consumption of saturated fats, cholesterol and sodium as they relate to coronary heart disease are areas requiring additional research. Also of crucial concern is the identification of

effective ways to enable individuals to make needed dietary changes a part of their life-style.

Southern University maintains a well-established human nutrition and applied food research program. The overall goal of the program is to improve nutritional status of individuals and thereby allow them to achieve their full genetic potential. Studies conducted since the 1970's have evaluated the dietary practices and nutritional health of low income families, determined prevalent dietary risks and their relation to metabolic disorders among various population groups, analyzed nutrient composition along with their chemical form in raw and processed foods, and examined effective nutrition intervention and food safety procedures. Ongoing research is designed to identify factors related to obesity as well as metabolic, psychological, behavioral and environmental concomitants of weight regulation in black females. Other studies focus on product development and processing value-added food products. Still others involve further evaluations of food quality, safety, acceptance, and nutrient content in relation to agricultural practices, processing and other conditions. These studies have resulted in improvements of the protein quality of breads through plant protein extenders, the development of a polyunsaturated "filled cream," and the development of a lifestyle intervention weight management program which facilitates weight loss and improves health factors.[38]

Other 1890 colleges/universities have contributed new knowledge through home economics research although limited information is available for the present discussion. At Delaware State College, studies have determined socioeconomic factors related to food management and the use of nutrition information by homemakers.[13] Lincoln University has a rich history of nutrition research within the 1890 environment. Researchers have completed comprehensive evaluations of the nutritional health of Missourians.[36] Most recent studies examine (1) the dietary, clothing and housing status of rural elderly groups; (2) the effect of dietary protein content on muscle growth and fiber composition; and (3) the management practices and profile of families with home-based businesses.

Formula-funded home economics research to date at 1890 institutions has contributed to the overall goal of improving the quality of life of individuals and families through both basic and applied studies in a range of problem areas. Research undertaken has emphasized problem areas of the clientele traditionally served by these institutions. Most projects have been station projects which related to the specific needs of clientele within a given state, and in a few cases, projects have involved collaborators at other institutions. Consequently, home economics research has been diverse with respect to problem areas, yet supportive of an overall common goal and broad in application and significance.

Station projects as well as developments in research capability at 1890 institutions have helped to substantiate commonalities in research problem areas and interests throughout the southern region and the 1890 college/university community at large. These projects and developments have also served to stimulate cooperation among 1890 and 1862 institutions in southern regional research projects in housing, textiles, and nutrition. Although joint research may have occurred between 1890 institutions and their 1862 counterparts in respective states, involvement in regional level research with 1862 institutions was an important development in research history. Additionally, home economics researchers have joined with scientists at other sister institutions in 1890 regional research projects.

UAPB and North Carolina A&T have participated in Southern Regional Research projects in housing: S-95, S-141, and S-194. Only UAPB was involved in the earliest project, S-95, conducted during FY 1973–79. This project focused on social and psychological components of housing quality for rural communities. Preferences of housing types were identified for low-income rural households along with factors which enhance their satisfaction with their housing environments. The outcomes of this study were used to develop qualitative standards for low-income housing environments. Both UAPB and North Carolina A&T were involved in the later projects. S-141, conducted in FY 1979–84, examined household responsiveness to innovations in housing design and technology. Several housing innovations were studied, including passive and active solar, earth sheltered, manufactured, and multifamily housing. This study provided information on the propensity of families to adopt housing innovations as influenced by demographic characteristics, age, education, income and other factors. S-194, conducted during

FY 1984–90, was designed to assess both institutional and infrastructural barriers and incentives to affordable housing in nonstandard metropolitan communities. This project is designed to examine the general attitude and receptiveness of community leaders, housing consumers, housing intermediaries (lenders, contractors, others) toward innovations in housing design, financing, and construction. This study provided a conceptual model for understanding the impact of attitudes, demographic and other characteristics on barriers and incentives to housing quality, affordability, and other innovations.[39-40]

UAPB has participated in two southern regional projects in textiles and is the only 1890 college/university to participate in regional textiles research. The first project, S-163, was conducted in FY 1981–86. This study of the functional textiles finishes for apparel fabrics determined comfort aspects, analyzed resistance to chemicals and harmful environmental agents, and assessed the impact of finishes on economic factors, including energy utilization. The specific work at UAPB compared the effects of hot and cold water on energy utilization, and durability, stability, absorbency, and other aspects of comfort and protection for apparel fabrics. The second project, S-208, was designed to evaluate textiles properties for performance, protection, and comfort, and the impact of textile fiber system variation on characterizing these properties in fabrics. At UAPB, studies compared the effects of fabric softeners, including liquids and dry sheets, on water repellency, breaking resistance, stiffness, durability and other components of performance, protection, and comfort in fabrics. This ongoing research project was planned for FYs 1986–91.[42]

1890 institutions have participated in two southern regional research projects in nutrition. Tennessee State University was involved in S-87, conducted in FY 1972–79, and thus, became the first 1890 institution to participate in southern regional nutrition research. This project was designed to assess the social, demographic, and other factors influencing the food patterns and nutritional status of preadolescent girls. Data were obtained on food and nutrient intakes and biochemical indices of nutritional health. A similar regional project, S-150, which involved adolescent girls was conducted in FYs 1979–85.

In addition to Tennessee State, cooperating 1890 institutions included Tuskegee University, Virginia State University, and UAPB. This project provided a comprehensive assessment of the nutritional health of this age group by measurement of dietary, biochemical, clinical, anthropometric and dental parameters, and the impact of social, psychological, economic, and other factors on nutritional health.

Further, in FY 1984, significant progress in the planning and coordination of home economics research among 1890 colleges/universities took place with the funding of the first 1890 regional research project in home economics, RR-4. This six-year project was designed to study the quality of well-being of elderly residents in the rural South through a unique assessment of basic physical needs—food, clothing, and shelter—as an integrated dimension of well-being. Eleven institutions participated in the project: Alabama A&M, Alcorn State, Fort Valley State, Kentucky State, Lincoln University, Prairie View A&M, South Carolina State, Tennessee State, UAPB, UMES, and Virginia State. Data were collected on more than 3000 men and women, aged 65 years and older, who resided in rural counties in states represented by each cooperating institution. This project will provide a comprehensive assessment of the actual as well as the self-perceived social, psychological, physical, and economic well-being of older adults in three age categories: the young old (65–74 years), the old-old (75–84 years), and the oldest-old (85 years and older). Additionally, the project allows for: (1) an examination of issues and concerns of older persons with respect to food, clothing, housing, health, transportation, income, available services and other factors; (2) an assessment of their nutritional status by dietary, anthropometric, and biochemical measurements; (3) a determination of housing status and environments, including housing types, ownership, structural condition, safety, handicap, and energy conserving features as well as other components of housing status; and (4) an assessment of clothing status, including consumption practices, inventories, and the relation of anatomical changes to clothing needs, fit, and consumption. This regional project is particularly significant for several reasons. First, the project focuses on rural elderly people who are more disadvantaged and underserved than their urban counterparts, and rural older adults represent a disproportionate share of the rural population. Second, limited information is available on elderly people in the South, although the southern region of this country has the largest concentration of elderly people. Third, this project will fill gaps in the literature on the self-perceived well-being of older adults, which may be a better indicator of the quality of well- being in old age than those determined by norms established in the younger population. Finally, the unique focus of the study on food, clothing, and shelter and their interdependence in well-being encompasses the primary human needs upon which other needs are built. Thus, this project may contribute to an understanding of the primary indication of quality of well-being in the later years.

Home Economics Extension is organized as a part of the Cooperative Extension Program at 1890 colleges/universities. Programs at the seventeen 1890 institutions (including Tuskegee) are collectively referred to as "1890 Extension Programs." These programs "exist to serve people in need," and have historically targeted rural people, the disadvantaged, limited-resource, low-income, and groups who often lack the educational background of most Americans.[43] The Home Economics Extension component has responded to needs related specifically to the individual, family, home and community well-being.

The 1890 Extension Programs as operated today have enjoyed a short history. Most programs, including the home economics component, began in 1972 (or thereafter), when the U.S. Congress reestablished the 1890 Extension Program. This legislation authorized direct funding for Extension at 1890 institutions, as well as funding to be administered by the Cooperative Extension Service within each applicable state. Today, the 1890 Extension Programs operate within the guidelines of the Food and Agriculture Act of 1977, and the subsequent legislation passed in 1981, which effectively established autonomy for funding 1890 Extension Programs.[43] Each 1890 Program has an Extension Administrator who is responsible for the overall leadership of the program at each campus. Administrators have historically been males with agricultural backgrounds. Three exceptions are known. In 1977, Dr. Thelma Feaster served as Acting Administrator and Associate Dean of the Extension Program at North Carolina A&T, and thus became the first female and home economist to have lead responsibility for administration of an 1890 Extension Program. Later, from 1983 to 1989, Dr.

Jacquelyn McCray, a home economist, was the Assistant Administrator of 1890 Programs at UAPB. Most recently, Dr. Alma C. Hobbs, a home economist, was named Interim Extension Administrator at Tennessee State (1989–present).

Home Economics is an integral part of all 1890 Extension Programs today, except for Langston University. The 1890 Extension home economists have been active participants in fulfilling the central outreach role of Cooperative Extension, that of disseminating practical and useful information to people in a form that may be utilized and applied by those it is intended to serve. Home economists have utilized a broad range of delivery techniques to reach the "hard-to-reach" clientele served by 1890 Extension Programs. Delivery systems have included training of paraprofessionals to deliver direct educational services to clients as well as other means of communications such as workshops, newsletters, other print materials, radio, television, and other communications technologies. Through innovative delivery systems and programming, Home Economics Extension has responded to the unique needs of clientele within a broad range of problems affecting individuals, families, and their environments.

The following discussion is intended to provide examples of Home Economics Extension activities during recent years at 1890 colleges/universities. Although examples are unavailable for each 1890 institution, citations provided illustrate the unique educational outreach accomplishments in home economics at 1890 colleges/universities. For a more comprehensive discussion of Home Economics Extension at 1890 institutions, the reader is referred to the recent work of Feaster et al.[44]

At Lincoln University,[45, 46] the Extension program started 15 years ago. The program is research-based, fits into one or more of eight national initiatives, and meets the needs of Missouri citizens. Home Economics Extension work is particularly geared toward three national initiatives: (1) family and economic well-being; (2) revitalizing rural America; and (3) improving nutrition, diet, and health. Specific objectives of Extension Home Economics at Lincoln include: (1) providing leadership for home economics groups and performing in other Extension activities on national, state, county, and campus level; (2) providing leadership and support for area food and nutrition specialists through consultation, inservice training, publications and other educational materials; (3) utilizing knowledge gained from nutrition research in Extension nutrition education program; and finally, (4) contributing to improve nutrition and health habits of families and individuals in Extension education programs. The priority populations served are older adults, low-income groups, and minority youths.

Home Economics Extension specialists at Lincoln have been actively involved in planning nutrition education programs in collaboration with the Missouri Gerontology Institute and in developing and disseminating a newsletter series designed to meet the needs of elderly Missourians who are unable to take advantage of meal programs and other services because of their living conditions. Additional program activities have addressed diet and health issues in obesity and resulted in the development of an effective weight control program, namely "New Dimensions." originally called "Eating Slim." An outgrowth of weight control research conducted at Lincoln, this program incorporates principles of behavior modification and nutrition and offers freedom for users to adapt to local and personal situations. Also, Extension home economics specialists have developed and implemented a successful program designed to teach stress management principles and help people cope with stress and its effects on family relationships. Methods included non-credit course work, news releases and a variety of programming efforts. Participants have indicated that such Extension efforts improved their knowledge and application of stress management as well as family communications and relationships in everyday living situations.

The mission of the 1890 Extension Program at Kentucky State University[47] is to help the "hard to reach," "unreached" and "limited-resource" farmers, homemakers, families, youths and communities to acquire the knowledge, skills and behavioral abilities they need to improve the quality of their lives and environment by utilizing resources, rapport and unique channels of communication. State and national trends in population mobility, household formation, family patterns, income, cost of living, and education affect individuals and families and accordingly influence the direction of Home Economics Extension at Kentucky State. The main objective of the Home Economics Extension component is to improve health through better nutrition. Home Economics Extension focuses on ways to balance the family diet for enhanced health today and in the future. The 4-H youth project provides nutrition education which helps youth to establish good nutritional practices. Similarly, the Expanded Food and Nutrition Education Program (EFNEP) for low-income families provides training on the benefits of a proper diet. In addition, Extension home economists work with families to improve communication among family members and to enhance the economic and educational stability of families. This program area focuses on balancing work and family, managing money and other resources, and consumer education. Low-income families are provided further help through Kentucky State University Family Development and Management Programs operated by Cooperative Extension.

The Extension Program at Alabama A&M[48-50] provides, as its core mission, educational assistance to improve the quality of life for families in Northern Alabama. To accomplish this mission, the Extension Program uses scientific knowledge focused on defined issues and needs. A significant component of the program is the Home Based Business Program (HBBP) area, which was initiated in 1984. Leadership for the effort is provided by home economics specialists, although specialists in other areas, including agriculture and natural resources, community resource development and 4-H have contributed. The overall goals of the HBBP are (1) to assist entrepreneurs who currently operate businesses at their homes in developing managerial skills needed for success and growth, and (2) to assist clients in launching their businesses for the first time. Evaluation of the HBBP is built into the regular system of program evaluation and it has identified many program benefits.

Home Economics Extension specialists at Alabama A&M have worked with the Department of Human Resources and SCAN (Stop Child Abuse and Neglect) to plan and conduct workshops for teens and adults. Family stability is a priority area and an important outcome of this work. Through child care workshops, parents have adopted effective child care, parenting, and time management skills. Further, Home Economics Extension activities such as parenting, teen pregnancy, child abuse and drug education are conducted in nontraditional male areas to attract male clientele. Educational programs in family resource management and family stability have assisted limited resource clientele particularly. Health and fitness is an area of priority concern for Home Economics Extension programming, and this area is promoted and sponsored jointly with state and local agencies. Trained youth and adult volunteers assist with diet and exercise programs.

Other components of the Home Economics Extension program at A&M include food and nutrition, clothing and textiles, and housing and home environments. Specialists in food and nutrition have developed nutrition education programs, which have helped individuals and families become more conscious of economical food purchases and nutritious menu planning. Special interest is focused on planning special diets for elderly people. Follow-up reports show improved health and food budgeting/management practices as a result of these Extension activities. In the clothing and textiles area, skills are taught to homemakers, men, boys and girls in the areas of construction, purchasing, and care and maintenance of clothing. Also, emphasis is placed on personal grooming and appearance as a means of building self-esteem. "Recycle Your Wardrobe" was a successful program conducted, which made a positive change in the attitude of homemakers and their family members who were seeking ways to combat inflation. In housing and home environment, specialists work particularly with adults, youths and homemakers. Programs have aided clientele in learning and adopting techniques for home improvement, energy conservation, and various other aspects of homes and grounds. Home Economics Extension at UAPB[51-56] has undertaken programs to accomplish a number of important goals. The home maintenance and improvement program teaches "do-it-yourself" home maintenance skills. Extension homemakers in various counties are trained to increase skills related to maintaining and upgrading their houses, furnishings and equipment. This program activity is a continuing need for Arkansas homeowners, and expansion in this program area shall include the development of materials, kits and samples of the newest household products and their usage to ensure a clean living environment.

Additional components of Home Economics Extension of priority at UAPB include adolescent pregnancy and parenting. The "Teen Pregnancy" program focuses on prevention. Specialists have developed a video teaching program which has been conducted in public schools for students in grades 7-12 since 1978. Decision-making skills taught in this program to prevent adolescent pregnancy can be applied in other situations and areas in life. The "Active Parenting" program aims to help parents become more effective in understanding and guiding their teenagers. Three fact sheets developed through this program include: (1) Talking with Teens, (2) Emotional and Social Changes in Teens, and (3) Physical Changes in Teens. Additionally, a more recent curriculum, "Helping Good Kids Be Better Kids," is multidisciplinary, based on interpersonal interaction and parenting skills and esteem building. Arkansas Extension workers participated with the Extension specialists at Texas A&M University in a research project: "Helping Black Adults Age 35–55 and Youth Age 16–19 Develop Personal Skills to Upgrade Employability." Similarly, the "Home-Based Business" program provides training and development in entrepreneurship and self-employment skills with an emphasis on the establishment, marketing, and management of home-based businesses which are of increased interest in Arkansas.

The Cooperative Extension Program in Prairie View A&M University[57] extends research-based educational assistance directly to families and individuals. The principal goals of Home Economics Extension are (1) to improve nutrition, diet and health; (2) to increase family income and stability; and (3) to build family strengths. Program activities in food, nutrition, and health are geared towards limited-resource families and individuals, senior citizens, young women, and children. The overall goal of these activities is to foster positive changes in food selection, meal management and health. "Are You at Risk for Osteoporosis?" is an example of educational materials developed by food and nutrition specialists to address the specific risk factors of diet-related diseases and to help clients increase their overall knowledge of diet and health problems. Similarly, Extension activities in family resource development have served to improve the economic security of families and individuals. This program has successfully helped limited-resource and low-income families manage the economic resources, meet their basic needs, cope with rapid social changes, and develop skills to enhance self-sufficiency.

Similarly, low-income families are served by the "Building Family Strengths" program. The clients of this program have demonstrated important improvements in their skills for dealing with external factors that impact the individual and/or family unit. The "Family Night-Out" workshop is one example of a sponsored activity which helps improve interpersonal as well as communication skills. Extension workers also provide referrals for clientele concerning job availability and development as a part of the overall goals to improve the well-being of individuals and families.

Extension Home Economics at Virginia State University includes several program areas: housing and structures, family management, housing and home furnishings, and child development.[58] Several projects have been conducted in these program areas which have resulted in improved living conditions, economic management, and human development practices of families. Projects in housing and home furnishings have served to provide information and to develop skills for selecting, maintaining, and restoring home furnishings. Skills developed in restoration of home furnishings have led to income-generating activities for numerous clients. Other projects in housing structures have provided training and assistance for low-and moderate-income families which led to self-help home repairs and overall improvement in the quality and appearance of residential communities. The ultimate outcome of these projects has been improved home, family, and community life in targeted neighborhoods. A notable project is the Southeast Asian Refugee Program, funded by Virginia State and Arlington County. This project assisted Vietnamese and Cambodian refugees in developing basic knowledge and skills necessary for their functioning as individuals and family units in a relatively sophisticated, high-cost, urban living environment.[59]

Other projects in Home Economics Extension at Virginia State have provided education and development for home-based business enterprises. Family management specialists have been involved particularly in the projects which have assisted clients in establishing home-based businesses as well as in successfully continuing these endeavors. Family management specialists have recently completed a project with the American Association of Retired Persons (AARP)[60] which was designed to improve the health and economic well-being of mid-life and older women. Work of child development specialists has assisted parents as well as youths in the understanding of child development tasks and the development of positive discipline and behavior practices among children during their formative years. Immediate goals of Home Economics Extension at Virginia State are in the areas of (1) educating youth as consumers of resources, (2) child care education for parents and other care-givers, (3) parenting education, (4) education to build strong families and competent kids, and (5) home-based businesses.

At North Carolina A&T, Home Economics Extension has focused over the years on areas of aging, clothing, family resource management, housing, food and nutrition, and human development.[61] Projects have provided direct education and training of clients in these areas, and have resulted in improved well-being. The following examples of the projects in Home Economics Extension at North Carolina A&T will demonstrate the range of services and accomplishments through this program.

The "Consumer Education" program, a joint effort between North Carolina State-Greensboro and A&T initiated during the late 1970's, improved consumer practices and skills of limited income families. The "Family Education" project, a multicounty program, helped family and individuals to better utilize available resources. The "Summer Intern" program has provided on-the-job experience in Extension for college seniors, and thus has contributed to needed career development efforts for this professional field of work. A Clothing Project for Youth, called "Sew For Fun" is another example of projects with an overall goal of fostering the development of young people. "A Tribute to Black Families," developed by human development and communication specialists, has been a successful, televised program which emphasized the strengths of black families.[62] Further, the "Nutrition Education" project for pregnant adolescents, first initiated in 1984 with partial funding by the March of Dimes, has aided in improving the nutritional health of this group over the years.[63,64] Also, the "Discovery Curriculum," developed in 1988, has served young people, particularly 4-H youths. This curriculum addresses issues of parenthood and family relations and has assisted 4-H youths in developing a variety of skills in environment, natural resources, and self-awareness as members of a family unit.[65]

Home Economics Extension at South Carolina State College includes several program areas: (1) Home-Based Skill Development in Home Improvement, (2) Diet and Health, (3) Clothing Construction and Recycling, (4) Home Safety in Rural Areas, and (5) Energy Conservation and Simple Home Repairs. Future plans are to continue working in these areas and emphasize increased volunteer participation. In Home-Based Skill Development, homemakers have improved their debt management skills and established successful home enterprise projects. In the Clothing Construction and Recycling program, clients develop skills and practices which save the clothing dollar and ultimately contribute to enhanced family economic stability and security. The Diet and Health program provides nutrition education for low-income families, which has resulted in increased dietary knowledge, improved eating habits, and the application of nutrition knowledge to control and lower the risk of diet-related disorders. Other benefits of this program include the enhanced understanding and application of food preservation techniques among low-income homemakers which has resulted in nutritional as well as economic benefits. The Home Safety program provides knowledge to homemakers and youth for improving attitudes and practices toward home and health hazards. In the Energy Conservation and Home Repair program, low-income families have improved their home environment and have gained knowledge and skills for wise and economic use of energy. The Family Community Leadership project has developed leadership qualities among individuals in low-income communities and enhanced their ability to solve community-based problems. These examples of projects emphasize the role of Home Economics Extension in meeting the basic needs of individuals, families, and communities in South Carolina.[66-69] The Home Economics Extension program at UMES has focused in recent years on seafood with emphasis on consumer education and utilization. The overall objectives of the program are: (1) to provide educational information and materials on the values and benefits of seafood, (2) to provide training on seafood selection and preparation, (3) to teach management of food budgets using seafoods, and (4) to increase participants' knowledge and skills relating to food safety. This work has direct benefits for the clients, and supports the economic development activities of their communities and the state at large.[70]

At Alcorn State University, Home Economics Extension has enhanced the level of living of low-income and limited-resource families in Mississippi, particularly residents of thirteen southwest Mississippi counties. The overall goal of the program is to inspire low-income individuals and families to use available resources wisely to improve the quality of their environment. Specific areas of focus in home economics include personal and family resource management, textiles and clothing, housing and home furnishings, leisure and cultural education, and family living and child development. These areas have imparted knowledge and skills which have led to increased family income and improved capacity to cope with economic crisis situations and fraudulent practices.[72, 72] The accomplishments in Home Economics Extension at Alcorn have had a far-reaching impact over the years. The family living and child development area has successfully expanded, teaching children from day care through elementary school grades 1, 2 and 3 effective ways and benefits of managing and saving money. Further, this program has focused on personal and family development throughout the lifespan. As an outcome of program activities, families have been prepared to cope with stressful situations related to children and other family members, such as parenting, teen pregnancy, and child and drug abuse. Recently, an intergenerational dimension was successfully added to this program, which fostered positive interaction among senior citizens and children. Family life and child development specialists network with other professional services to provide medical, educational and other assistance with social, physical and economic ailments affecting family members and rural communities.[71] The clothing and textiles program area has taught family members to recycle clothing and to adapt their wardrobe in order to keep clothing costs down. Through the "International Year of the Child Project," clothing specialists taught mothers to make attractive but inexpensive toys and clothing for children.[72] Other similar projects have served to develop clothing construction and other creative skills in adults and youths. The housing and environment program area has historically trained family members in management, decision-making, energy conservation, and economic aspects of the home environment, as well as in housing and home furnishing repair, interior design, and care. Through these as well as other home economics Extension Projects at Alcorn, limited-resource families, homemakers, and youths in Mississippi have acquired knowledge, skills, and behavioral abilities which have ultimately improved the quality of their environments.

At Langston University, Home Economics Extension is discontinued at this time. While ongoing, the program focused on low-income families and had the overall goal of improving their quality of life through education and development in home furnishings, family relations, nutrition, and child development. Home economics had made appreciable strides in these program areas which served to improve family stability and well-being.[73]

At Southern University and Louisiana State University,[74-77] the primary concern of Extension is adopting modern technology and improving the quality of life of small and low-income farmers and limited-resource families. Special programs in Home Economics have been planned to meet the economic, sociological and physiological needs of the homemaker. Impoverished and deprived families need continued assistance in family development. Presently, these target families have become more receptive to the Extension program. A variety of education programs have been developed which include full participation of low-income black and white families. Home Economics specialists work with ethnic groups to create a network whereby they learn new ideas and methods from one another.

Nutrition and family life are two important areas of Home Economics Extension at Southern. The nutrition area addresses critical needs and issues of the target families, with emphasis on reaching clients who suffer from malnutrition and hunger. A significant accomplishment of nutrition activities has been improvement in dietary practices of these groups.

The family life area focuses on education programs which help clients to cope with the impact of an erratic economy. Homemakers develop and apply coping skills to combat physical, psychological and economic stress. 1890 Home economics specialists prepared a benchmark project in "Financial Planning and Management." The project trained the deprived families to use their resources to establish home-based business, to prepare themselves for the job market, and to apply money management skills for limited incomes. This projects has been very successful based on evaluations of behavioral changes of clients and their utilization of the knowledge gained.

Home Economics Extension at Delaware State College has focused on a number of programs.[78] Examples of most recent programs include the "Latch-Key/After School Program," which deals with the youth at risk in limited-resource families. This program has helped such youth to learn new skills, select friends, gain self-respect and develop their leadership capabilities. The "Volunteer Financial Counseling Program" has helped alleviate unemployment and has improved financial management and use of credit by limited-resource participants. The "Whatcoat Summer Youth Program" has addressed the need for affordable care of school age children during the summer, which is a critical need for the community. Finally, another successful project is the "Project Leap-up" program, which targets youth living in public housing and other limited-resource housing. The project has assisted in the development of self-concept and other human skills which deter youths and their parents from becoming involved in substance abuse.[78]

Home Economics Extension programs at 1890 colleges/universities have supported the overall outreach mission of these institutions and have contributed to the overall goal of improving the well-being of Americans, including some of the most underserved high risk groups as well as those who may be in the mainstream of our society. Given the present and emerging issues related to individual and family well-being, the present and future challenges of 1890 Home Economics Extension are formidable. In 1988, the Cooperative Extension System identified eight national priority initiatives which addressed future needs and direction of the Cooperative Extension System: (1) alternative agriculture opportunities; (2) building human capital; (3) competitiveness and profitability of American agriculture; (4) conservation and management of natural resources; (5) family and economic well-being; (6) improving nutrition, diet and health; (7) revitalizing rural America; and (8) water quality (serving people in need). These initiatives are recognized as being essential to the social, economic, and physical well-being of all American citizens in the twenty-first century.[79] Also these initiatives are issue oriented, and provide tremendous opportunity for specialists to bring multidisciplinary, problem-solving approaches to bear on emerging issues in our society.

Home economics programs, including resident instruction, teaching, and research, have historically responded to the unique needs of clientele served by 1890 colleges and universities, as well as to the needs and changing trends of our society at large. The future direction and role of home economics will of necessity be impacted by its roots—a rich tradition of enabling individuals and families to improve their quality of life through teaching, research, and Extension programs. Further, the future success of home economics will be created, in large measure, by policy decisions of the present, their consequences, as well as the response of home economics programs and professionals to the trends and issues of today.

Several issues pervade higher education today which have a fundamental impact on the future success of any program, regardless of type of institution. Program quality, accountability and effectiveness are timeless public issues in higher education which are of increased prominence today. Public trust in the American system of higher education has lessened, and educational programs and their outcomes are now challenged by both the public and private sectors. All would agree that programs must demonstrate educational "quality"; however, standards for measurement of program "quality" are often variable from the perspective of the academic community versus its external environments. Programs must demonstrate effectiveness with respect to delivery of expected outcomes, as well as professional, economic, and social accountability to the publics they serve. These three concepts—quality, accountability, and effectiveness—appear to be basic to the future survival of higher education programs, including home economics, and to higher education, itself.

Declining financial support at both state and federal levels is another key issue in higher education today. This issue is particularly relevant to 1890 home economics programs. Low or declining enrollments in these programs often translate into lessened state financial support. Decreasing student federal aid impacts higher education access, especially for students served by 1890 colleges/universities. Moreover, declining financial support is an issue which permeates the total educational system—people, other resources, environment, and thus, opportunities. Additionally, faculty shortages, coupled with a decline in persons selecting an academic career, changing demographics of student population, and the globalization of our economy are at issue in higher education today. Faculty shortages mitigate against programmatic continuity, new direction, and simply, program survival. In home economics, these shortages are especially severe at the Ph.D. level in critical need areas, and most severe for minorities, including blacks, in those areas. Demographic shifts in the student population have redefined the concept of "traditional" students. The increasing population of minority groups in our society, including blacks, Hispanics, Asians, and others, the increasing proportion of college-age minorities, as well as the increasing number of commuting, part-time, older and other so-called "nontraditional" college students, may mean that these groups are becoming the "traditional" student population of the future. These demographic trends have increased the attention of the larger academic community to educational needs of minorities, and have brought to the forefront of higher education issues of "diversity" and "pluralism" with respect to the total infrastructure of programs, academic services, facilities, educational delivery, and social and environment supports.

Additional demographic, political, economic and sociological trends in higher education and home economics in general have particular relevance to home economics programs at 1890 colleges/universities. In a recent survey, administrators of home economics units at 1890 institutions delineated major trends and issues which were believed to impact the future of home economics at historically black institutions. Examples of their responses are presented in Table 2. Among these are issues related to faculty, students, curricula, funding, facilities, marketing and image of home economics programs and the profession, and minority development for the profession. These issues are not unique to the 1890 home economics environment. A cursory look at recent Proceedings for the Joint Annual Meetings of AAHE/NCAHE (Association of Administrators of Home Economics/National Council of Administrators of Home Economics), for example, indicates a similar range of issues related to the future of home economics as a field of study and as a profession at the national level. Dr. Eva Adams, Chairperson of the Department of Home Economics at Delaware State College, likened the challenges of 1890 programs to those of the home economics profession at large. She stated:[80]

> In the decade of the 1990's the Home Economics profession is faced with unprecendented issues and challenges. There are times when mere survival seems to be at stake. Professionals in the field must acknowledge and evaluate former priorities, establish appropriate directions for contemporary society and renew efforts to accomplish goals. As I reflect upon what I consider to be some of the major priorities and challenges confronting the Home Economics profession in contemporary society, I am able to identify the following: (1) establishing a more positive professional image including articulating and demonstrating the mission and goals of the field to decision makers in the political, governmental and business sectors, educational institutions and social agencies; (2) helping students develop interpersonal skills to function effectively in corporate America and the world; (3) assisting students in developing marketable skills and competencies for future oriented careers and for assuming leadership roles in a global society; and (4) preparing students to participate effectively in the consumer citizen role.

The real challenge for 1890 home economics programs appears to be that of maintaining quality, relevant and marketable programs amidst an academic climate characterized by (1) diminishing resources; (2) fewer number of minorities, particularly blacks, selecting home economics careers; and (3) increased competition for resources, including minority faculty and students. Home economics programs at 1890 colleges and universities have historically attracted, retained, and prepared minority leaders, particularly blacks, for the profession with minimal investment of specialized recruitment and retention efforts. The academic culture of these institutions, as well as the social and political environments of the time were among the factors which contributed to the situation. Similarly, 1890 programs have historically attracted and retained minority faculty. The 1890 units must continue to seize initiatives to develop minorities for the home economics profession. Minorities, including blacks, are still underrepresented in this profession. Vaughn provided a thorough analysis of this issue and outlined strategies for the profession at large to move forward in addressing this concern.[83] The 1890 home economics units have a successful history which has uniquely prepared them for continued development of minorities in this profession. The future requires specialized and competitive marketing strategies as well as a rethinking/redirection of curricula, resources, and educational delivery systems to attract traditional as well as new markets for 1890 home economics programs. Dr. Harold Mazyck, Chairman of the Department of Home Economics at North Carolina A&T University stated:[81]

> Home Economics in the 90's and beyond will undoubtedly take a different direction in regard to academics, as well as function. Home Economics will want to lean to the left to develop an entirely new agenda which addresses strategies for managing life styles for individuals in society. Televison, big business, drugs, AIDS, (Acquired Immune Deficiency Syndrome), jobs, politics and life crises and more continually affect the agenda each person makes for himself. Basic management skills need to be taught so that the individual can become a survivor. These skills one will put into practice in a real life setting and thus learn to survive by surviving. To know how to cook, to sew, to raise children and make a budget are minuscule. The issues are broader, more complex and encompassing and often without an answer. Home Economics is not gender specific. Strategies for life style management exist without respect to gender. It is a continuous process through which all people continually pass during the course of living.

Further, inherent in a successful future of 1890 home economics programs is strategic planning to demonstrate a destinctive role of programs, which evidences home economics (or whatever label is used) as a recognizable, necessary entity of higher education, uniquely capable of addressing changing public needs. In focusing on the future of the home economics profession, Dr. Ramona Kellam, Head of the Department of Home Economics at Langston University stated:[82]

> Historically home economics has focused on meeting the needs of families. Although the American family has been transformed over the years since the founding of home economics, the family is still the basic unit of society and the major source of nurturance for the individual. As professional home economists, we must continue to work to create the type of global society where families and individuals have the freedom they need to grow and work on the solutions to problems that affect everyone. We must use every advantage

> that technology and education has to offer in the search for solutions to crime and delinquency, poverty, prejudice and discrimination, drug abuse, health and illness, environmental degradation, world population growth, and gender equity. We have an obligation to educate the next generation, to make a positive contribution to strengthening families, that they may cope with diversity and rapid change.

Further, the future success of 1890 home economics programs requires the best and collective vision of administrators and leaders who ultimately control the destiny of these programs. Collaboration and cooperation to establish partnerships with internal as well as external interests appear very important for enhanced funding opportunities, enhanced program quality and competitiveness. The 1890 home economics administrators have already established a structure to favor collaboration among 1890 home economics units, as well as other units and groups in the home economics community at large, government, industry, and other external groups. This structure is the Council of 1890 Home Economics Administrators (CHEA), which was organized in the early 1890's for the purpose of stimulating and facilitating common interests of teaching, research, and Extension in home economics at 1890 institutions. Also, the CHEA provides a network for input and linkage of 1890 units with professional, administrative, and policy-making bodies for home economics at national and regional levels. Currently, in progress through the CHEA is a project, "Curriculum Revitalization of Home Economics Units at 1890 Colleges and Universities," funded through the Office of Higher Education Programs, Cooperative State Research Service, U.S. Department of Agriculture. This project will determine the current status of research, instruction, and service activities at 1890 home economics units. Anticipated outcomes of this project include restructured academic programs, enhanced program marketing and recruitment skills, and linkage with 1862 institutions, business, and industry.

Further, the Capacity Building Grants Program, a competitive program within the 1890 environment, was initiated this year by the U.S. Department of Agriculture. The overall goal of this program is to assist 1890 colleges and universities, including home economics units, in strengthening their capacities in teaching and research in the food and agriculture sciences. This program also encourages collaboration of 1890 institutions with business, industry, other colleges/universities and federal agencies. These initiatives will help 1890 institutions meet the challenges impacting the future of their home economics units.

In the author's view, the words of Dr. Flossie M. Byrd provide the best way to close this chapter commemorating "a century of progress through teaching, research and Extension" in home economics at 1890 colleges/universities. Dr. Byrd, a product of Florida A&M, has dedicated her professional career to the 1890 system. She is a leader in home economics at the national level, a 1990 recipient of the Distinguished Service Award of AHEA, and a role model and mentor for many. With respect to the future of home economics, Dr. Byrd stated:[84]

> Home Economics must continue to address the changing constellation of forces impinging upon individuals and families, and ultimately, upon humanity. The psycho-social-cultural-spiritual needs of individuals and families in the global context mandate creative approaches in instruction, research and extension. Two somewhat diverse influences—the needs of emerging democracies to ensure family well-being and to develop requisite competencies for managing recently acquired resources, on the one hand, and the needs of a growing service economy, brought on by technological advances of the Information Age, on the other hand—provide the environment for the most challenging and rewarding times in the history of the profession. Providing leaders for an age to be characterized by social, political, educational and leadership empowerment is paramount to maintaining the family as the "bedrock of civilization." As the Year 2001 approaches, it is imperative that Home Economics, in the words attributed to General Omar Bradley, paraphrased, "steers its ship by the stars (namely, the constants of the profession—individuals, families, humanity) rather than by the lights of every ship (elusive trends, fleeting concepts) that passes."

CHAPTER NINE

Shadows From The Past: Challenges Of The Future

DURING the one hundred years since the passage of the Second Morrill Act, the 1890 institutions have offered an uneven but relatively high quality of land-grant services to their students and constituents, even though many shadows from the past have made it extremely difficult. Among the problems facing the historically black land-grant college system were: inadequate financial resources for offering the land-grant triad of teaching, research and service; inadequate personnel who worked under differential salary scales; legal racial segregation and discrimination which severely limited the educational delivery system; and students' disdain for the agricultural curriculum and other land-grant functions because these were seen as vestiges of the plantation system and exploitive tenancy in the South. It is understandable that 1890 institutions could not grow and develop as did their 1862 counterparts.

As was noted in earlier chapters, 1890 institutions began with emphasis on liberal arts or classical education with teaching as the major occupational focus. It was not until the 1920s and afterwards that most developed standard four-year bachelor's programs in agriculture and home economics. Because of racial segregation the main objective was to prepare teachers for black schools and farm and home demonstration agents and specialists to serve black people in the South. With the increasing mechanization of farms, the exodus of blacks from farms to cities, the rapid loss of farm land by black people, and the rapid decrease in black schools after the Supreme Court decision of May 17, 1954, the traditional opportunities for blacks in agriculture and home economics likewise decreased.

With a mandate from the Supreme Court to desegregate the public school system "with all deliberate speed," various states took different steps in reacting to the mandate. Within a relatively few years, 1890 institutions were elevated from college to university status or incorporated into existing university systems; however, increases in financial and human resources and in programmatic expansion and development were not sufficient to justify university status. The following 1890 institutions were elevated to university status: Alabama A&M University in 1969; University of Arkansas at Pine Bluff in 1972; Florida A&M University in 1953; Kentucky State University in 1972; University of Maryland, Eastern Shore in 1970; Alcorn State University in 1974; North Carolina A&T State University in 1967; Tennessee State University in 1951; Prairie View A&M University in 1945; and Virginia State University in 1979.

The struggle to desegregate public schools in the South and in border states led to the closing of many black public schools and, of course, the loss of teaching positions for agricultural and home economics teachers. With the loss of those traditional positions, and with the inability of 1890 institutions to add new programs and modernize curricula to reflect the trends in the field, enrollments in most agricultural and home economics areas decreased noticeably. With small and decreasing enrollments and with increasing demands for state higher education systems to desegregate, it was not difficult for state governing boards to zero in on duplicative land-grant functions being offered at 1862 and 1890 institutions.

In higher education, agricultural and home economics programs appeared to bear a heavier portion of the burden to desegregate and establish a unitary system than did other disciplines. In West Virginia, all land-grant functions were transferred from West Virginia State College to West Virginia University in 1957, and that historically black college ceased to be labeled as a land-grant institution. While space will not permit an examination of the impact of desegregation upon all of the 1890 institutions, several will be selected to emphasize the typical experiences faced by these colleges and universities. The treats of abolition, merger or change of educational mission not only adversely affected faculty and student recruiting but virtually destroyed the morale of many administrators and professors associated with the institutions.

Desegregation in Kentucky and at Kentucky State University moved with greater rapidity than at most 1890 institutions. Encouraged by the success of public school desegregation in Louisville, and appalled by a low enrollment of approximately 800 students at KSU, legislators began calling for a retrenchment in KSU's academic programs if not the abolition of the institution itself. Because of the low enrollment in agriculture and the inabiiity of the institution to offer quality programs, in 1958 the regents voted to eliminate the Department of Agriculture at the end of the 1960–61 academic year.[1] So the agriculture department, which had operated the campus farm since 1897, became a page in history at the University and home economics became the focus through which land-grant functions would be realized.

Prior to the abolition of agricultural functions in 1961, student boycotts, disrupted classes, and campus violence were prevalent. When the student enrollment fell to 700, the question being asked by the white community was: "Did Kentucky need a campus that unwittingly promoted *de facto* segregation?" In 1962, prior to the presidency of Dr. Carl M. Hill, nationally renowned chemist, Representative George J. Ellis introduced a bill to convert KSU into a junior college and transfer or retire senior faculty to the University of Kentucky. So President Rufus B. Atwood, who worked so hard to develop KSU into a strong land-grant institution, saw agricultural functions abolished during the last year of his administration. President Hill, a man with strong academic and administrative credentials, assumed the leadership of KSU stressing "basic excellence" as the theme. Hill had to spend much of the early years "improving the image and substance of an institution that had been maligned in both the press and the state legislature."[2] He had to channel land-grant functions through vocational and technical home economics since agricultural programs had been lost prior to his arrival.

The University of Maryland, Eastern Shore found its very existence questioned in 1977 when a report prepared by a legislative budget analyst argued that the Maryland State Board of Higher Education should close the institution because "enrollment...has shrunk to the point where continued operation is no longer economically justified."[3] Chancellor

William Hytche of UMES retorted: "They've talked about making this place a chicken farm and they've talked about making it a prison farm. They've talked about making it a junior college and they've talked about merging it with some other school. Now a legislative analyst says it should be shut down."[4] Another option was merging UMES with Salisbury State College, located 12 miles away, where enrollment had grown while UMES enrollment had declined and where the cost per student was $3,041 as compared with $6,631 at UMES. However, a storm of criticism from alumni, students, faculty, administrators, and townspeople prevented the Board from taking action. So again, another black institution was being punished for inadequate development when the state, through its policies of segregation, isolation, inadequate support, and curtailed course offerings, had failed to encourage or even permit growth at the institution.

In the wake of the movement to abolish or merge UMES, Dr. Albert H. Berriau and Dr. Leonard L. Haynes III, consultants from the Institute for Service to Education, concluded that: "The University of Maryland - Eastern Shore should be allowed to become a viable instructional unit within the University of Maryland System, with supplemental responsibilities for research and public service."[5] Because of its land-grant functions and long-standing relationship within the University of Maryland System "UMES deserves to be developed in its own right as a legitimate component of the University of Maryland, rather than by merger with an historically less prestigious institution."[6] Citing the *Adams states* requirements that historically black colleges be "enhanced rather than diminished," the consultants stated emphatically that such a merger would run against the *Adams states* agreements and against the spirit of a unified educational system in Maryland. So any proposed severance or abolition of the UMES campus would meet stiff legal opposition. If merger is a course for UMES and the University system authorities to consider, then it can only be done within the context of Salisbury State College being merged into the University of Maryland system as part of the UMES campus and with the latter maintaining its expended land-grant functions.[7] The insistence that UMES would remain the parent institution in case of a merger helped to diminish the fervor with which budget analysts had called for abolition or merger.

During the early 1970s there appeared to be a conspiracy on the part of some white community leaders, professors, and students to discredit black administrators, faculty, and students at Fort Valley State College, by claiming that the college was guilty of reverse discrimination and of offering an inferior education to its students. The white opponents of the College did not argue that FVSC was not open to all regardless of race, color, creed, national origin, or sex, but rather, its "open door" policy caused it to offer a substantially inferior education when compared with other colleges. Dr. Bill K. Dalton, who taught physics and mathematics at FVSC, publicly called the College " a diploma mill run by blacks for blacks...a disgrace to the black race."[8] He further alleged that the College had hired twenty-five white faculty members and given them teaching and unimportant faculty committee assignments that did not put any of them in position to even attempt to change the college.

On the other hand, there were those among the professors, students, and administrators at FVSC who believed that the opposition to the College was not based on concern for the quality of teaching and learning, but was an effort on the part of the local white power structure to take control of the college. All white professors did not agree with those who went public with negative criticism. Eight white professors jointly told the press that President Waldo W. E. Blanchet "has never discriminated against any white members of the faculty as a whole...we categorically reject the idea the President Blanchet has created a difficulty teaching atmosphere for white members of the faculty."[9]

Out of the conflict, FVSC saw its future severely challenged by the case of *Jack R. Hunnicut, et al, vs. W. Lee Burge, et al.*[10] The plaintiffs were twenty-nine white taxpayers who were either students or parents of students desiring to attend a racially and academically improved Fort Valley State College; two white faculty members at the College; and three of sixteen white students then enrolled at the College. The defendants were members of the Board of Regents of the University System of Georgia. The class action by the plaintiffs sought to compel the Board of Regents to (a) desegregate this all-Negro state college and (b) institute effective measures to eliminate the inferior academic level and below standard graduation requirements that exist and are imposed by the Board of Regents at Fort Valley State College. From 1973 to 1988, the Hunnicut vs. the *Board of Regents* case was actively pursued from time to time in the federal court. The Division of Agriculture was one of the academic areas at FVSC which the court felt had highly trained personnel and a program that could make a real contribution to the economic development of agriculture in middle Georgia.

On July 5, 1988, a Consent Decree signed by Judge Wilbur D. Owens, Jr. in the case of *Hunnicut vs. Board of Regents* established a nine-member Advisory Council for Fort Valley State College.[11] The Council is chaired by the Chancellor and acting President Melvin E. Walker, Jr. and Regent Anderson and six other members of the community make up the Council. Additionally, three review teams—faculty development program, management review, and program review—were established to help the college progress toward greater integration and academic advancement on a periodic basis. The agricultural research projects at FVSC on such topics as peach tree short life, sweet potatoes, exotic fruits, storage of leafy vegetables, and poultry production are evidence of cooperative ventures between the College and middle Georgia business and industries.

In 1968, James F. Tucker came to Virginia State University (VSU) as its sixth president, and held that office for only eighteen conflict-ridden months. His short tenure in office was made more difficult when the State of Virginia began making involuntary steps toward the establishment of a unitary state system of higher education. Between 1969 and February 1970, the United States Department of Health, Education and Welfare (HEW) concluded that ten southern states, including Virginia, were operating segregated systems of higher education in violation of Title VI of the Civil Right Act and requested that each of the ten states submit a desegregation plan within 120 days. One aspect of the desegregation plan which adversely affected VSU was a proposal in late 1969 by officials of Virginia Polytechnic Institute and State University, state officials, and selected administrators at VSU that the School of Agriculture at VSU be transferred to Blacksburg and merged with the School of Agriculture at VPI or Virginia Tech.

Under the proposed plan all faculty members in Agriculture at VSU would be transferred to the campus of Virginia Tech. In order to make the transfer less painful, it was proposed that teacher who were less than professors would be promoted to the next highest rank; e.g., associate professors would become full professors. While there were some faculty members who were willing to accept the new arrangement, others were vehemently opposed. In an atmosphere of optimism the president of Virginia Tech and some of his administrative staff came to VSU to begin working on arrangements for the transfer, only to find strong opposition crystallizing among both students and faculty.

On December 10–11, 1969, "Virginia State's 2600 Concerned Students and Faculty met in Virginia Hall Auditorium to express their gripes against the merger of the School of Agriculture with Virginia Polytechnic Institute."[12] Expressing their desire that the school remain a land-grant college, some students and faculty dressed in black, some wore black armbands, and a casket was placed on stage representing VSU's School of Agriculture with a sign reading "Don't Let Me Die in Vain." Taking issue with Governor Godwin's statement that the merger was being consummated "to the benefit of all concerned," the students boycotted classes because they wanted to protest what they saw as a first step toward making VSU "a branch of Virginia Tech."[13]

The Concerned Students and Faculty drew up a list of twelve "demands" affecting all aspects of the University and submitted them to the Board of Visitors. The seventh demand focused directly upon Agriculture:

> Whereas the faculty and students of Virginia State College were not involved in the decision to merge Virginia State College's School of Agriculture with Virginia Polytechnic Institute's School of Agriculture, and inasmuch as Health, Education, and Welfare will require a desegregation plan within 90 days, we demand a reversal of the decision to merge and that the final consummation of the merger not be effected until students and faculty can evaluate the full impact of the merger.[14]

The list of demands further called for the resignation of President James F. Tucker "because he has evidenced a lack of leadership qualities in each of the areas of the University."[15] Faced with stiff opposition from both students and faculty and a complete loss of confidence in his leadership, President Tucker resigned in February 1970.

As a result of student/faculty protest and the resignation of President Tucker, no programs in agriculture were transferred from VSU to Virginia Tech. Dr. Overton Johnson, Director of Agriculture at VSU, who initially opposed the transfer, said: "If I go to VPI, I'll go only as a full professor and second man in the School of Agriculture." He finally went to VPI as a full professor, but he did not become the second man as he hoped. Before leaving, he was quoted as saying that Virginia State was "a has-been, that's what the School of Agriculture is."

Although agriculture at VSU had never received the support necessary to carry on high-quality research, there were faculty members who took issue with the "has-been" designation. Provisions for agricultural research were made as early as 1937 when a research sub-station in cooperation with VPI was established at VSU for research on field crops. However, direct funding for agricultural research at VSU did not become available until 1967 when annual appropriations of approximately $18,000.00 in federal funds were provided as a result of Public Law 85–934. This funding was by 1972 increased to around $700,000.00 annually under Public Law 89–106. So at a time when the School of Agriculture was receiving more direct funding for research, the efforts to move agricultural programs from VSU to VPI resulted in a setback for these programs that has not yet been overcome. When the Virginia State Legislature became perturbed over the inability of VSU and VPI to merge their agriculture programs, no funds were allocated to support agricultural programs at VSU. So in 1971 the program of agriculture was reorganized and the administration reduced the School of Agriculture to a Department; however, options in basic agriculture were retained. The Department of Agriculture was located in the School of Science and Technology with a B. S. degree in agriculture being offered. Student were free to elect options in Agricultural Business and Economics, Agricultural Education, Agricultural Mechanics, Animal Science, Horticulture, and Plant and Soil Science. In assessing the adverse effect of the cutback, Professors Field and Carter wrote:

> Microbiology was transferred to another department, the statistical laboratory was discontinued and the sub-experiment station was no longer financially supported. Scholarships were lost. The teaching staff was reduced to approximately three-man equivalents...in the strictest sense of the word, there are no full-time teaching personnel in the department.[16]

After nine years as a department and after the loss of considerable influence in the field of agriculture, a new School of agriculture and Applied Sciences was established at VSU by President Thomas M. Law on November 3, 1980, with Dr. B.B. Archer serving as Dean. Dean

Archer, a graduate of VSU with a Ph.D. from Ohio State University, and previously a Professor of Agriculture and Administrator of Cooperative Extension Services at FAMU and the University of Florida, accepted the task of administering the multifaceted unit. The School was composed of the following departments: Agriculture; Pre-Veterinary Medicine and Animal Science; Plant, Soil, Water and Environmental Sciences; Engineering Technology; Industrial Education and Technology; and Human Ecology.

Even though agriculture was remade into a multifaceted school, there was apparently little or no financial commitment to a quality agriculture program at VSU. For example, Professor I. C. Peoples, who gave more than 32 years of service to the university, and who had published research on "Effects of Lauryl Sulphate on Egg-Shell Quality in Laying Hens," complained bitterly about the deterioration of agriculture programs. He complained to then President Wilbert Greenfield in 1984 about the fact that a majority of researchers, including those in poultry husbandry, were being abruptly terminated. The final paragraph of his letter stated:

> ...if I sound angry, it is because I am angry. I am angry because a former Director of the School of Agriculture here at the University, teamed up with a former President of VSU and attempted to take the entire program of Agriculture to Blacksburg. The succeeding President had a flea market sale at Randolph Farm by an auctioneer and practically gave away over $200,000 worth of animals and equipment to White farm operators for less than $12,000. Yes, I am angry because there is not a decent tractor or truck on the farm. I shall remain angry as long as your advisors feed you with information and ideas that will destroy our entire agricultural program.[17]

The Randolph Laboratory Farm, which made virtually nonfunctional by the above neglect, was viewed by the agricultural faculty as a vital component of the educational process by which VSU attempted to ulfill its mission as a land-grant institution. This 416-acre farm with appropriate facilities was needed to support instruction, research and extension in agriculture and related programs. Despite the "give-away" referred to above, the farm was sorely needed to support cooperative agricultural research, extension demonstration projects, pasture for beef cattle and swine, and the production of soybeans, corn and forage crops. Although the School of Agriculture lost much during the years of indecision about the role of agriculture at VSU, the Randolph Farm must again be made strong for it is an "indispensable facility for practical instruction, agricultural experimentation, and result demonstration."

South Carolina State College (SCSC) was particularly hurt by the integration/desegregation movement when it lost its agricultural programs to Clemson University in 1971. Nevertheless, there appeared to be a degree of consensus among some faculty members that programs should be transferred because the College could not bring together the personnel and resources necessary to train agriculturalists. Although the Department of Agriculture at SCSC tried to diversify its offerings around 1950 and thereafter, basically, its training was centered "around the learning experiences sought by the county agricultural agents and the vocational agricultural teachers during the time."[18] Recognizing the need for rapid change, the School of Agriculture and Home Economics was formed in 1959 and placed under a dean. The aims of the various curricula in Agricultural Economics, Agricultural Education, Animal Science, and Plant Science were designed to effectively parallel those in any land-grant university. However, the lack of student enrollment, small division/department budgets, inadequate research and extension funds, and the loss of trained faculty mitigated against the implementation of the modern and progressive curricula aims.

As the Self-Study Report for the School of Agriculture and Home Economics states:

> New opportunities in employment were made available to black agriculturalists during the 1950 and 1960 decades. Students who sought academic preparation in the Division of Agriculture became interested in specialized subject-matter training. Especially was this true during the 1960s. The division recognized, however, an inadequacy in facilities and personnel to provide the type of training needed to prepare its graduates for the newly created competitive opportunities in private industries of the economy and in state and federal employment.[19]

With inadequate state and federal support, it appears that agricultural leaders at SCSC had been pushed to a point that they were willing to "throw in the towel." So, in 1966, a team of agriculture specialists evaluated the capability of the Division of Agriculture and concluded that "for the sake of Negro students who are interested in an agricultural major and for the sake of the state economy, the agricultural study program at South Carolina State College should be phased out."[20] The Report further states that "the faculty is unanimous in its belief that the Division is not presently serving the needs of agricultural majors, and that the administration and staff of the division, therefore, concur in the discontinuance of the agricultural study program at South Carolina State College."[21] So the Division of Agriculture was discontinued at SCSC in May of 1971 and the program transferred to Clemson University.

Black students who desired to do so were encouraged to study agriculture at Clemson University. They were to have the option of taking the first two years at SCSC and transferring to completed the specialized work. South Carolina State College is not completely devoid of agricultural offerings for in 1984 an Agribusiness curriculum leading to both the bachelor's and master's degrees was implemented.

Like other 1890 institutions, Florida A&M University found itself fighting for its existence in agriculture and home economics during the academic year 1977–78. Just as sustained funding was assured by the federal government under Pl-95-113 for work in cooperative state research and extension, the Florida Board of Regents staff, in its effort to eliminate "unnecessary duplication," recommended that all nine of FAMU's academic offerings in agriculture be discontinued and/or relegated to the role of options in programs of other academic units. It was assumed that the University of Florida would supply the state's needs in agriculture to all people in the state of Florida. Likewise it was recommended that Home Economics (then called the Division of Consumer Science and Technology) be transferred in its entirety to the Florida State University College of Home Economics.

Having anticipated the abolition of agriculture and home economics during the early 1970s and in an effort to escape any charge of "unnecessary duplication" of programs offered at 1862 institutions, President B. L. Perry, Jr. reorganized the University in 1974 and tried to "store" agriculture programs under the rubric of the Division of Rural Development and home economics under the Division of Consumer Science and Technology. Perry employed Lieutenant Colonel Robert L. Rollins, an alumnus, to keep in touch with organized pressure groups among FAMU supporters and "to keep the president advised and maintain communication between the administrator, the Office of Civil Rights of Hew and the Florida Chapter of NAACP."[22]

One of the top spokesmen for agriculture among these groups was T. M. Hill of Tampa. At least nine major statewide or national groups, along with students and alumni, were fighting to Save FAMU" and specific programs from merger and abolition.

By the time the showdown for the abolition or transfer of agriculture and home economics came before the Board of Regents in session in Jacksonville, on July 10, 1978, a new president, Dr. Walter L. Smith, was FAMU's chief administrator and a relatively new dean, Dr. Charles C. Kidd, was Dean of the College of Science and Technology. Both fought to maintain the programs. After it appeared that all was lost, President Smith appealed to Regent William Malloy to allow FAMU to retain at least half the courses in agriculture as its land-grant emphasis. When the Board of Regents vote was taken, Regent Malloy's position won. FAMU was able to save four programs: Animal Science, Agribusiness, Ornamental Horticulture and Entomology and Structural Pest Control. A fifth program, Landscape Design, was later placed in Agriculture. As of 1979, several key agriculture programs (control of agricultural education and extension service, botany and plant science, earth sciences, general agriculture, park management, and soil science and agronomy) were given to the University of Florida. The loss of these programs further weakened the College's ability to recruit students and faculty. At about the same time, Home Economics, with 138 students and the majority of its faculty, was transferred to Florida State University, effective 1978. Even though this loss in enrollment through the transferring of programs from FAMU to the University of Florida and Florida State University had an adverse affect upon FAMU, it was difficult to emphasize the apparent racism involved since it was the black leader James Gardener, Chairman of the Board of Regents and an alumnus of FAMU, who sanctioned the transfers. So for a period, agriculture and home economics had to be deemphasized and emphasis placed on more modern and popular career-oriented programs.

The problems and adversities associated with the six institutions discussed above were duplicated in practically all of the black land-grant colleges in the form of direct court cases, consent decrees, reduced legislative appropriations, and threats of merger or abolition. The most influential of the court challenges in the 1970s was *Adams v. Richardson* in June 1971, which charged that the U. S. Department of Health, Education, and Welfare (HEW) and the Office of Civil Rights had failed to enforce Title VI of the Civil Rights Act of 1964 with reference to the state systems of higher education. Instead, it was alleged HEW was actually providing funds to school systems, colleges and universities that continued to practice segregation and discrimination on the basis of race. The ten states involved, popularly known as the *Adams states*, were Arkansas, Florida, Georgia, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, Pennsylvania, and Virginia. While great stress was placed on the 1890 institutions during the implementation of statewide desegregation, the *Adams* decision offered some protection to historically black schools in the desegregation process by maintaining that changes must "enhance" their programs and that the implementation of a desegregation plan "may not place a greater burden" upon the historically black institutions. Also, the National Association for Equal Opportunity in Higher Education (NAFEOHE), founded in October 1969, became an agency which, among other things, supplied the public and the courts with factual information about the accomplishments of black colleges, their success in integrating faculties and student bodies, and the adverse impact that the movement toward a unitary system could have on such institutions.

So despite shadows from the past, lack of expansion, and threats to the existence of many 1890 institutions in the 1960s and 1970s, many were able to begin demonstrating their potential to deliver quality teaching, research, and extension service in response to increased federal appropriations and, in some cases, new and challenging programs that were placed on 1890 college campuses.

One of the major challenges for 1890 institutions is the continuous development of links with African, Caribbean, and other Third World countries designed to help these nations solve their educational, economic, agricultural, social and health problems. Already 1890 institutions and Tuskegee have made significant inroads, especially in Africa, but as the twenty-first century approaches they must provide further opportunities to use their expertise to help solve problems related to international development.

From the turn of the twentieth century there is minute evidence of the involvement of 1890 institutions and Tuskegee University in Africa. While any listings of these early efforts will be sketchy indeed, they will show an effort on the part of historically black colleges to offer service. In 1899, Tuskegee provided more technical assistance to Togo to help the Togolese learn how to grow cotton. Again, Tuskegee began international training in 1912 by establishing a Booker T. Washington Institute in Liberia with programs following an agricultural and industrial model, and North Carolina A & T State University sent a staff to Liberia in 1946 to help develop the agricultural economy. Florida A&M University, whose first president was a native of Sierra Leone in Africa, points with pride to Frank E. Pinder, an alumnus, ('33), who rendered distinguished service in Liberia, Ghana, and other points in Africa. For his outstanding service many agencies have honored him with appropriate awards. Also, in 1962, FAMU gave Dr. B. L. Perry, Jr. a leave of absence to serve as Dean of Students at the University of Nigeria in East Nigeria. More recently, Virginia State University and other 1890 institutions helped with the development of Egerton College in Kenya. These and other examples show that 1890 institutions were early conscious of their responsibility to Africa.

While isolated examples like those above can be found in the records of most black colleges and universities, and while students from Africa and Third World countries have studied at all of them, it was not until the 1975 Title XII Amendment to the 1951 Foreign Assistance Act that formal opportunities were provided for black institutions to participate in the development of United States government assistance programs. Thus, historically black colleges and universities (HBCUs) began giving assistance through programs to less developed countries. By 1979, Alabama A&M University, Florida A&M University and other colleges and universities received substantial funds under the Title XII Strengthening Grants (SG). These grants enabled interested faculty members to engage in various activities with counterparts of their choice in developing countries, supported special foreign language training for interested faculty and staff, served as the main support for establishing and maintaining the Office of International Programs, and supported graduate student whose research was related to problems of developing countries.

In order to assist 1890 land-grant institutions, Program Support Grants were offered through the U. S. Agency for International Development (USAID). USAID instituted a mode of program planning known as Joint Memorandum of Understanding (JMOU). Under the JMOU a partnership was created joining 1862 and 1890 institutions and USAID. Thus, the institutions would work together on projects with each institution's personnel providing technical service or guidance in their areas of expertise. For example, Florida A&M University established a JMOU with Michigan State University for service in rural development in Vihiga, Kenya. Alabama A&M University formed a partnership with Kansas State University for work with Upper Volta, Kenya, Sierra Leone, and other points. In all, twelve of the historically black land-grant institutions are presently involved in partnerships with 1862 institutions and USAID.

That 1890 schools are incorporating international development into their institutional missions may be seen both in mission statements in their catalogs and in offices of international development on their campuses. Fourteen of the black land-grant institutions now have international programs: Alabama A&M University, Tuskegee University, University of Arkansas at Pine Bluff, Florida A&M University, Fort Valley State College, Southern University and A&M College, University of Maryland-Eastern Shore, Lincoln University, North Carolina A&T State University, South Carolina State College, Tennessee State University, Prairie View A&M University, and Virginia State University. These institutions have millions of dollars in projects in such places as Barbados, Burkina Taso, the Caribbean, Gambia, Haiti, Indonesia, Kenya, Latin America, Malawi, Nepar, Peru, the Philippines, Rwanda, Sierra Leone, Sudan, Tanzania, Trinidad, Zaire, and Zimbabwe.

An example of some of the international research activities follows: the University of Maryland-Eastern Shore is engaged in research and technical assistance on a "Roots and Tuber Crop Project" in Cameroon for the period 1986–1991. Florida A&M University gave Peru technical assistance in "Agricultural Estimates" from 1984 to 1987 and did research on a "Swine Monitoring Project" in Haiti from 1985 to 1987. Fort Valley State College conducted research in India on "Incidence and Field Management of Infertility in Cattle and Buffaloes" from 1987 to 1988. Southern University gave technical assistance in Sierra Leone on "Adaptative Crop Research" between 1978 and 1986, and between 1987 and 1990, Tennessee State University was carrying out international research on health in Botswana, agriculture for tropical developing countries of Africa, and rural employment in Thailand. These are just a few of the areas and the types of assistance being offered in foreign locations.

Most international projects in which 1890 institutions are involved are sponsored under a joint memorandum of understanding with 1862 institutions. the 1890 institutions were strengthened in their international activities with the establishment of the Southeast Consortium for International Development (SECID) which began in 1977 with 31 universities, one research and all historically black land-grant colleges and universities. The purpose of SECID was to provide technical assistance, training, and procurement services to developing countries. It was the umbrella under which 1890 institutions made substantial inroads in international development. In recent years, however, Alabama A&M University, Florida A&M University, and the University of Maryland-Eastern Shore have joined together to sponsor a "Tropical Root and Tuber Research Project" in Cameroon which runs for a five-year period from 1986 to 1991. This is perhaps the first international project of this nature sponsored independently by historically black land-grant institutions.

As 1890 institutions become more involved in international activities it will be essential that these schools take the leading bringing together financial resources, personnel, and appropriate research, extension, and technical assistance projects essential for establishing functional ties with Third World and developing countries. Already eight 1890 land-grant institutions and four private institutions have banded together to establish the Cooperative Institute for International Policies

Research and Education (CIPRE). The CIPRE planning committee was composed of Dr. Charles C. Kidd, FAMU, Chairman; Dr. John Parrish, Talladega College; Dr. George Cooper, Alabama A&M University; Dr. Gus Ridgel, Southern University; and Dr. James Kirkwood, Fort Valley State College. The goals and objectives are clearly stated:

> The Institute must design instruments which can marshal the vast storehouses of knowledge and technical expertise resident in the participating HBCUs to help people in the Caribbean and Africa solve their social, economic, agricultural, or health problems. The interaction of scholars, government employees and researchers from the Caribbean and African countries and capable personnel from the HBCUs will make a significant contribution to mutual understanding and respect between the United States and the involved Caribbean and African countries. The Institute will also develop and implement an integrated training program for Blacks and minority professionals who are interested in pursuing international careers and duties with the U. S. Foreign Service.[23]

CIPRE contains all of the elements necessary for establishing strong international linkages. It is timely because the USAID and the U. S. Congress have been searching for ways to utilize the pool of talent at minority institutions in international programs. FAMU, with financial assistance from USAID, is coordinating the support of the HBCUs and has been assured of the continuing support from these institutions. It is anticipated that more schools will join in this venture in the near future. While CIPRE appears to be a very promising organization, it is too early at this point to attempt an evaluation.

The challenge of bringing together and maintaining increasing sources of federal, state and private sector funding must be met if 1890 land-grant institutions are to operate effectively. Historically, funding for instructional, research, and extension programs has not been sufficient to allow for full development at an acceptable level of quality. While federal support has increased significantly during the last two decades, state funding for research and extension is still at an extremely low or virtually non-existent level in all sixteen states where 1890 land-grant institutions are located. It appears likely that private sector funding could be more easily attracted if states were to demonstrate with appropriate funding their faith in historically black colleges and universities.

That federal funding for both agricultural research and extension has increased significantly may be seen in the fact that appropriations for 1890 institutions have climbed from a mere $238,000 in FY '67 to $49,300,000 FY '90. Also, in 1982, Congress authorized $50 million to 1890 institutions and Tuskegee for upgrading and expanding research facilities. These funds were distributed over a five-year period at approximately $10 million per year divided among the institutions. In recent years, through the efforts of USDA, the 1890 institutions have received support for their teaching programs in agriculture through the Strengthening Grants and more recently in FY '90, the 1890 Capacity building Grant Program designed to increase teaching and research capabilities. Furthermore, agencies such as the Forest Service, Agriculture Research Service, Farm Home Administration, National Agricultural Library, and other agencies continue to maintain partnerships with these historically black institutions. More recently, Secretary of Agriculture Yeutter established a USDA-1890 Task Force to enhance partnership between the 1890 institutions and Tuskegee University and agencies of the USDA to maintain and strengthen the nation's agricultural enterprise.

It can be said without question that the USDA had intensified its efforts in recent years to assist 1890 institutions in their development. But as Dr. Samuel L. Donald, Director of the Division of Agriculture, Research, and Extension and Applied Sciences at Alcorn State University and currently chairman of the Association of 1890 Deans/Directors of Agriculture wrote:

> This is a good start, but more can and must be done. Key USDA laboratories should be located on the campuses of 1890 land-grant colleges and universities. USDA personnel employed in these laboratories have had a positive impact on teaching programs in the 1862 land-grant colleges. The same kind of impact would result if these laboratories were located at the 1890s.[24]

So as federal funds are increased, matching and support funds from the several states must likewise increase. As the states and nation become more aware of the high quality of research and service rendered by scientists and specialist at 1890 institutions, not only will the government become more supportive, but the private sector will also become a more vital source of support.

The 1890 institutions must accept the challenge of recruiting and training more minority students to become scientists and agriculturalists in academe as well as in the work force in the South, throughout the nation and on the international scene. During the 1970s and early 1980s, enrollment in agriculture at most of these colleges and universities dropped to alarmingly low levels. For example, at Florida A&M University, enrollment fell to 44 in 1985. However, with the passage of the USDA Strengthening Grant in 1985, which focused on recruiting minority students, more vigorous efforts were made to alleviate the human capital shortage in agriculture. FAMU's enrollment increased to 111 students by 1989.

Since the absence of blacks in scientific agriculture constitutes something of a national crisis for 1890 institutions and the constituents they serve, recruiting techniques must be more intensive and more sophisticated. Dr. Ray Shackleford, Coordinator in the College of Engineering Sciences, Technology, and Agriculture believes that to be an effective recruiter for agricultural sciences, one must: (1) break down the perception that agriculture is merely farming; (2) identify high school students taking strong college preparatory courses which could likely ensure success in the various fields; (3) offer a modern and challenging curricula in the various fields of study; and (4) provide scholarship aid from the federal and state governments as well as the private sector.

That black participation in agriculture has reached an alarmingly low level may be seen in an examination of graduates at the various levels across the nation. In one of the most recent compilations by the National Center for Education Statistics in 1986 it was reported that of the 14,991 graduates at the bachelor of science level in agriculture and natural resources, only 290 were black; of the 3,521 at the master of science level, only 79 were black; and of the 148 Ph. D. degrees, only 18 were black. There were more foreign student completing the master's and doctorate in these fields of study than African-Americans.[25] With this low level of output of blacks in agriculture and natural resources, 1890 institutions cannot fill many of their positions with black role models, nor can blacks make much impact elsewhere in the work force.

In order to survive, 1890 colleges of agriculture will have to market themselves attractively in competition with other schools and colleges. Creative approaches might include providing high school partnership programs to improve the transition to college life; developing early freshman intervention programs; encouraging retention of students perceived to be at academic risk; providing substantive academic advice and strengthening student support services; establishing special tutorial and enrichment programs; providing special academic assistance for foreign students; and focusing on second-career workers and nontraditional students.[26]

For the foreseeable future, 1890 institutions will have the challenge of providing the primary opportunity for black undergraduate students to study in agriculture and home economics. It is through these colleges and universities that the land-grant functions—teaching, research, and extension service—will be provided to minority students, and that essential linkages can best be established with the "hard to reach" and "unreached" population. As Dr. William P. Hytche, Chairman of the Council of 1890 Presidents and Chancellors and current President of the University of Maryland - Eastern Shore declares: "Our students must remain our focus, but not our only focus, as we continue to reach beyond our boundaries to assist communities and conduct research in the land-grant tradition related to agriculture, forestry, home economics, agribusiness, marketing, substance abuse, youth at risk, and homelessness."[27] Recognizing the rapid proportional growth in the populations of blacks and other minorities and the somewhat numerical position that they will hold in our public school systems and the work force within the next two decades, he cautioned: "Let us not forget the blacks and other minorities who will be the major contributors to our work force of tomorrow. Educating them is the key to the future growth and success of our institutions and this nation. Education for them must be affordable, rewarding and achievable."[28]

The mission today for 1890 institutions is essentially the same as the land-grant mission was more than a hundred years ago. It was to educate people for the purpose of stimulating agricultural production, improving the quality of life, and for revitalizing rural America, while producing better citizens in urban as well as rural America. Indeed, the evidence indicates that 1890 land-grant institutions have the ability, the empathy, and willingness to deliver land-grant functions to a discernable segment of the population if given appropriate resources. Curricular revitalization is one key to success in meeting the land-grant functions.

As 1890 institutions move toward the twenty-first century, they have the challenge of constantly strengthening and modernizing the curriculum in order to prepare their graduates to meet societal demands on the domestic as well as international levels. Therefore, agricultural training should be offered in a global context, with the curriculum including courses and appropriate experiences in selected phases of international development. Agribusiness, which already has proved to be popular on historically black campuses, should be expanded and upgraded to better provide a broad program of studies to support both technical and professional education. Minority students must be trained to enter agribusiness corporations and help with their new chemicals, with their hybrid seeds, with their processing facilities, with their banks and credit associations, and with their scheme for vertical integration. Dr. Robert Bradford, associate Dean of the College of Engineering Science, Technology, and Agriculture at FAMU feels that successful agribusiness programs will require professional internships for students with both industry and government during their baccalaureate studies. Also, he sees the need for a "professional development" component in the curriculum to help underachieving minority groups develop the speech patterns, social skills, and confidence that are necessary to function successfully in the corporate world.

The natural sciences in the curriculum should be more highly emphasized and supported by modern computerized technology for any discussion of agricultural research in the years ahead will include references to biotechnology and information technology. Since biotechnology is the application of biological systems and organisms to technical and industrial processes, the 1890 institutions and Tuskegee University must prepare their students for the many opportunities in this area.

Curricula changes do not presuppose that standard programs like Agronomy, Animal Science, Horticulture, Landscape Design will not be prominent in the 1890 curriculum, but rather, curricula offerings must be revitalized systematically, and made relevant to the world in which graduates will assume leadership roles. While all programs of teaching and research must be concerned about the multicultural society of which we are a part, 1890 institutions and Tuskegee must be conscious of their responsibility of building human capital especially among minorities by developing the skills, abilities, and understanding that people need in order to reach their full potential in their families, organizations, communities, and work places.

Last year the USDA further intensified its efforts to help bring blacks into the mainstream of American agriculture. On May 8, 1989, Secretary of Agriculture Clayton Yeutter named seventeen U. S. Department of Agriculture employees as agricultural liaison officers with historically black 1890 land-grant colleges and universities and Tuskegee University. Liaison officers will be located on the campus of each institution and will coordinate all USDA activities and agencies there. Yeutter indicated that the appointment of agricultural liaisons is part of the USDA's efforts to strengthen relationships with 1890 institutions and encourage more minorities to pursue careers in agriculture and forestry.

Thus, the top priority for the liaison officers will be to work with state and local USDA officials to recruit more minorities to study agriculture and forestry at 1890 institutions. They will also provide guidance and teaching assistance, help develop curricula, recruit and counsel students on employment opportunities within USDA and in other agricultural careers, and provide some assistance to small and limited-resource farmers. Yeutter stated: "We are committed to increasing the role of minorities at USDA and in agricultural occupations in general. Our success in doing this will depend to a great extent on the work of the 1890 liaisons."[29]

Rozier W. Crew, liaison officer at FAMU, sees this program as vital in the growth and expansion of agricultural programs in 1890 institutions. In 1990 more than 400 student internships were available to 1890 institutions and Tuskegee University. Black colleges and universities must capitalize on this an other initiatives because recruitment and retention of students and faculty are the lifeblood of these programs.

Finally, 1890 institutions must continue to meet the challenge of engaging in research and providing extension service to their constituents with the aim of helping them achieve their full potential as productive individuals. Attention must be focused on the problems and opportunities confronting limited-resource farmers and the rural populations as well, but, at the same time, scientists must also be partners in other types of research that impact the national and international scenes.

Basic to meeting the challenge to their traditional constituents is helping limited-resource farmers save their farms. Not only are the farms operated by blacks very small and generate less than $5,000 per year, but are decreasing faster than farms operated by whites. Structural changes for black farmers in Florida, which are similar in other Southern States, will give a picture of the decline of black farmers:

> During the time period from 1930 to 1982, numbers of black farmers decreased from 11,043 to 1,7 69. More significantly, the proportion of black farmers has also decreased from almost 19 percent of all Florida farms in 1930 to only 4 percent in 1982. As a result, black farmland has decreased from 514,831 to 106,095 acres, or from 10 percent of Florida farmland to less than one percent.[30]

Since black farmers are becoming almost totally "dispossessed", 1890 institutions appear to be their best hope for developing adaptive strategies to save their farms and cope with small farm problems. So 1890 institutions and Tuskegee have the challenge of working effectively within the framework of the nine national initiatives identified for the Cooperative Extension System but for the foreseeable future they must concentrate on those initiatives that bring direct assistance to limited-resource farmers, homemakers and families, youth at risk, and depressed urban communities. They must be assisted in acquiring the knowledge, skills, attitudes, and abilities they need to improve the quality of their lives and their environment. The twenty-first century will demand from the 1890 institutions effective, comprehensive programs designed to deliver factual, objective, practical, problem-centered and people-oriented information and service which will enable people on the domestic and international scenes to solve problems, make decisions and take advantage of new opportunities.

BIBLIOGRAPHY

The following bibliography does not purport to be a complete set of references on the history of the 1890 land-grant institutions. However, in compiling this volume, use has been made of a wide variety of sources: unpublished manuscripts; official records and documents; reminiscences and interviews; student, faculty, alumni, and special group publications in agriculture and home economics; and a variety of articles and secondary works. While this bibliography will call attention to the many source materials on 1890 institutions, *A List of References for the History of Black Americans in Agriculture, 1619–1980* by Joel Schor of the U. S. Department of Agriculture is a useful bibliography in the study of land-grant functions in historically black colleges and universities.

Adams, E. W. (1990) *Historical Profile of Home Economics Programs at 1890 Colleges/Universities* (Rev/12/89). Dover, Delaware: Delaware State College, Department of Home Economics.

Adams, E. W. (March 1990) Personal Communication. Dover, Delaware: Delaware State College.

Agri-News, Alabama A&M University, School of Agriculture, Environmental Science and Home Economics, November 1984.

Alcorn State University General Catalogue (1988–1990). Lorman, Mississippi: Alcorn State University.

Alexander, E. L. *Centennial History of Arkansas AM&N College, 1873–1973.* (Pine Bluff: Unpublished manuscript, 1973).

Allen, A. L. (1980) *Annual Goals—FY 89.* Little Rock: University of Arkansas, Cooperative Extension Service.

Allen, A. L. (1990) *Arkansas Rural Revitalization—Home-Based Business in Arkansas.* (Accomplishment Report), Little Rock: University of Arkansas, Cooperative Extension Service.

Allen, A. L. (1990) *Dilemmas and Choices Affecting Arkansas Children and You* (Amended). (Accomplishment Report). Little Rock: University of Arkansas, Cooperative Extension Service.

Allen, A. L. (1990) *Home Maintenance and Improvement in Arkansas.* Little Rock: University of Arkansas, Cooperative Extension Service.

Allen, A. L. (1990) *Parenting—Arkansas* (Amended). Accomplishment Report. Little Rock: University of Arkansas, Cooperative Extension Service.

Allen, A. L. (1990) *Youth at Risk* (Accomplishment Report), Little Rock: University of Arkansas, Cooperative Extension Service.

Allen, John W. "The Role of Tuskegee Institute in the Education of Black Farmers." *Journal of Negro History*, Vol. 60, April 1978, pp. 252-257.

Andrews, Benjamin F. *The Land Grant of 1862 and the Land-Grant College,* (Washington: Government Printing Office, 1918).

Announcement of the First Annual Tennessee A&I University Farm and Home Institute, August 11-12, 1958.

Annual Report for FY 1979. Lorman, Mississippi: Alcorn State University, Alcorn Cooperative Extension Program.

Annual Report for FY 1980. Lorman, Mississippi: Alcorn State University, Alcorn Cooperative Extension Program.

Archer, B. B. *Accomplishments in Agricultural Science at Virginia State University.* (Unpublished manuscript, 1990.)

The Associated Press, May 8, 1989.

The Atlanta Journal, July 15, 1972.

Baton Rouge State Times, June 30, 1916.

Bellamy, Donnie D. "Henry A. Hunt and Black Agricultural Leadership in the New South," *Journal of Negro History*, Vol. 60 (October 1975) pp. 464-479.

Benson, H. R. (1989) *Comprehensive Extension Program of Work, 1862 and (1890) Institutions.* Jefferson City, Missouri: Lincoln University, Cooperative Extension Program.

Berner, Lewis and Pescador, Manuel L. *The Mayflies of Florida* (Revised edition). (Tallahassee: University Presses of Florida, 1988).

Berriau, Albert H. and Haynes, Leonard L. *A Study of the History and Future Development of the University of Maryland-Eastern Shore*, Mimeographed copy. (Washington: Institute for Service to Education, July 25, 1977.

Bond, H. M. *Ham and Eggs: A History of the Fort Valley Ham and Egg Show.* Georgia Agricultural Extension Service Bulletin 513, June 1944 (Athens: University of Georgia).

Brewton, John E. *Higher Education in West Virginia: A Survey Report.* (West Virginia: Charleston, 1956).

Brief Historical Development of the University of Maryland Eastern Shore. Unpublished manuscript, anon., 1977.

Bullock, Henry A. *The History of Negro Education in the South.* (Cambridge: Howard University Press, 1967).

Butler, Addie L. J. *The Distinctive Black College: Talladega, Tuskegee, and Morehouse.* (London: The Scarecrow Press, 1977).

Byrd, F. M. (March 1990) Personal Communication. Prairie View, Texas: Prairie View A&M University.

Catalogue of the Officers and Students of Alcorn Agricultural and Mechanical College (1906–1907). Lorman, Mississippi: Alcorn State University.

Catalogue of the Officers and Students of Alcorn Agricultural and Mechanical College 1910–1911. Lorman, Mississippi: Alcorn State University.

Centennial Accomplishments Report. *A People and a Spirit Serving the Nations of the World.* (Alabama A&M University: 1890 Land-Grant University Centennial, 1990).

A Century of Service, 1985–1986 Annual Report of Raymond M. Burse, President, Kentucky State University, October 22, 1987.

Chapman, James Oscar. "A Historical Study of Negro Land-Grant Colleges in Relationship with Their Social, Economic, Political, and Educational Backgrounds and a Program for Their Improvement." Unpublished Ph.D. Dissertation, Ohio State University, 1940.

Civil Rights Cases, 109 U. S. 3, 25, (1883).

Clark, Felton G. "What are the Negro Land-Grant Colleges Doing to Fabricate a Program to Meet Present-Day Needs." *Proceedings of the Conference of Presidents of Negro Land-Grant Colleges*, October 21–23, 1952.

Collins, J. B. *Alcorn State University Branch Experiment Station: A Brief History.* Unpublished manuscript, 1988.

Commemorative Papers from the Iowa State College Centennial. (Ames, Iowa: Iowa State College Press, 1958).

Congressional Record, 63rd Congress, Second Session, February 5, 1914, pp. 2929–2928.

Consent Decree, U. S. District Court of Middle Georgia. (Macon Division No. 86-281 MAC, July 5, 1988.

Conteh, D. (1990) *Historical Profile of Home Economics Programs at 1890 Colleges/Universities* (Rev.12/89) Fort Valley, Georgia: Fort Valley State College, Department of Home Economics.

Cooperative Extension Program: The People Connected. Kentucky State University: Frankfort, Kentucky.

Cooperative Extension Service, *Years of Progress: Extension Progress, 1971–1981.*

University of Arkansas, Division of Agriculture (UAPB) p. 10.

Coppings, Richard, "Let's Eat...Rabbit Meat," *Farm and Home Bulletin* Tennessee State University, November 1982.

Cotton, Barbara R. *The Lamplighters.* (Tallahassee: United States Department of Agriculture and Florida A&M University, 1982).

Couvillon, G.A., Foley, C. W. Glover, E., Williamson, H. and Schmidt, B. L. (1990) *Review Report of Research and Related Programs in Agriculture and Home Economics at the Tuskegee University.* Washington, D. C.: U. S. Department of Agriculture Cooperative State Research Service.

Crosby, Earl W. "Building the Country Home: The Black County Agent System, 1906–1940." Ph. D. Dissertation, Miami University, Oxford, Ohio, 1977.

Crosby, Earl W. "Limited Success Against Long Odds: The Black County Agent," *Agricultural History,* Vol. 57, No. 3. (July 1983).

Crosby, Earl W. "The Roots of Black Agricultural Extension Work," *The Historian,* Vol. 39 (February 1977), pp. 228–239.

Crosby, Earl W. "The Struggle for Existence: The Institutionalization of the Black County Agent," *Agricultural History,* Vol. 60, No. 2, (Spring 1986), pp.

Cyrus, E. J. (1990) Financial Planning and Management, Louisiana, 1890 *(FY 88-91 Major Accomplishment Report).* Baton Rouge, Louisiana: Southern University and A&M College. Cooperative Extension Program.

Cyrus, E. J. (1990) Food Preservation, Louisiana 1890 *(FY 88-91 Major Accomplishment Report).* Baton Rouge, Louisiana: Southern University and A&M College, Cooperative Extension Program.

Cyrus, E. J. (1990) Home Economics, Civil Rights/Equal Opportunities, Louisiana, 1890. *(FY 88-91 Program Accomplishment Report).* Baton Rouge, Louisiana: Southern University and A&M College, Cooperative Extension Program.

Cyrus, E. J. (1990) Nutrition. Louisiana 1890 *(FY 88-91 Major Accomplishment Report).* Baton Rouge, Louisiana: Southern University and A&M College, Cooperative Extension Program.

Daily Herald, 1885.

Daniels, R. P. *Special Report Relating to the Present and Future Status of Presidents of Negro Land-Grant Colleges.* November 17, 1985.

Davis, John W. Land-Grant Colleges for Negroes. *West Virginia State College Bulletin,* Sec. 21, No. 5 (Institute: West Virginia State College Press, April 1934).

Dhillon, J. S. "An Overview of Social Science Research at Historically Black Land-Grant Colleges and Universities (1890 Instititions)." Unpublished manuscript presented at the Annual Rural Sociological Society, Cornell University, August 22, 1980.

Dhillon, J. S. and Howie, Marguerite eds., *Dimensions of Poverty in the Rural South.* (Tallahassee: Florida A&M University, 1986).

Driskell, J. A. and Myers, J. R. (1989) "Human Nutrition Research Conducted at State Agricultural Experiment Stations and 1890 Tuskegee Agricultural Research Programs," *Home Economics Research Journal.* Vol. 3 No. 17, pp. 270–278.

Dunham, Melerson Guy. *Centennial History of Alcorn A&M College*, (Hattiesburg: University and College Press of Mississippi, 1971).

Eddy, Jr., Edward Danforth. *Colleges for Our Land and Time: The Land-Grant Idea in American Education.* (New York: Harper and Brothers, 1957). *1890 Research and Extension News*, Spring 1987, Vol. 2, No. 2.

Enterprise, Alabama Brochure, The Chamber of Commerce, 1988.

Favero, P. and Heasley, D. K. (1989). *Cooperative Extension and New Alliances for Rural Economic Development: Five Case Studies* (Publication No. 58). Normal: Alabama A&M University, Cooperative Extension Program.

Feaster, T. J., Hobbs, A., McCray, J., and Barkston, J. (1990) *Home Economics Extension Programs at the 1890s.* Greensboro, North Carolina: North Carolina A&T State University, Agricultural Extension Program.

Fergusa, E. (1990) *Southern Regional Textile Research.* Personal Communication, Pine Bluff, Arkansas: University of Arkansas Cooperative Extension Service.

Fields, M. A. and Carter, M. T. *History of Agricultural Curriculum and Randolph Farm.* Unpublished mimeographed paper.

Florida A&M University, College of Engineering Science, Technology, and Agriculture. *Annual Report*, 1890 Cooperative Extension Program, 1988, p. 2.

Fort Valley State College Catalog, 1988–1990.

Funchess, W. (1990) *Historical Profile of Home Economics Programs at 1890 Colleges/Universities* (Rev.12/89). Orangeburg, South Carolina: South Carolina State College, Department of Home Economics.

Funchess, W. (1990) *Historical Profile of Home Economics Programs at 1890 Colleges/Universities* (Rev.12/89). Department of Home Economics.

Gandy, John M. "The Program of Education at Virginia State College: Vindication." *Virginia State Gazzette*, Vol. 45, December 1939, pp. 3–9.

Garner, James W. *Reconstruction in Mississippi.* Baton Rouge: Louisiana State University, 1968.

Gladwin, Christiana H. and Zabawa, Robert. "Structural Strategies of Small, Part-time, Black Florida Farmers: A Response to Structural Change," *Agriculture and Human Values*, Vol. 11, No. 3 (Summer 1985) p. 51.

Glover, E. E. (1987) Formula-Funded Human Nutrition Research in 1890 Universities—An Historical Perspective. In Levander, O. A., *AIN Symposium Proceedings* (pp. 9–13). Maryland: American Institute of Nutrition Press.

Guzman, Jenie P., et al. The Negro Year Book. (Tuskegee Institute, 1941–1946).

Hall v. DeCuir. 24 L. Ed., 547, (1878).

Hardin, John A. *Onward and Upward: A Centennial History of Kentucky State University.* (Frankfort: Kentucky State University, 1987).

Harlan, Louis R. *Booker T. Washington Papers*, Vol III (Urbana: University of Illinois Press, 1956.

Harlan, Louis R. *Separate and Unequal.* (Chapel Hill: University of North Carolina Press, 1958).

Hartshon, W. N. (Ed.) and Penriman, George W. *An Era of Progress and Promise*, 1863–1910. (Boston: The Priscilla Publishing Co., 1910).

Hatch Act of 1887, Section 2.

Hayslett, William, "The Sweet Potato: The Versatile Vegetable Crop," *Farm and Home Bulletin*. Tennessee State University, November 1981.

Henderson, C. (1990) *Current Program Activities and Priorities in Home Economics* (Accomplishment reports). Normal: Alabama A&M University, Cooperative Extension Program.

Henderson, C. (1990) *Narrative Report of Accomplishments—FY 1980*. Alabama A&M University, Cooperative Extension Program.

Hicks, Sylvia. "Low Income Farmers Receiving Benefits from Virginia State," VSU, *Cooperative Extension Service*, p. 11.

Highlights of the Kentucky State Community Research Service Program, Bulletin No. 1, 1982.

Hightower, Jim. *Hard Tomatoes, Hard Times: The Failure of the Land-Grant College Complex*. (Washington, D. C.: Agribusiness Accountability Project, 1972).

Historical Profile of Home Economics Programs at 1890 Colleges/ Universities (1990, Rev.12/89). Greensboro, North Carolina: North Carolina A&T State University, Home Economics Department.

Historical Profile of Home Economics Programs at 1890 Colleges/ Universities (1990, Rev.12/89). Nashville, Tennessee: Tennessee State University, Department of Home Economics.

Holmes, Dwight O. W. *The Evolution of the Negro College*. (New York: The Teachers College, Columbia University, 1934).

Huam, J., Smith, M., and Glover, E. (1990) *Historical Profile of Home Economics Programs at 1890 Colleges/ Universities* (Rev.12/89), Lorman, Mississippi: Alcorn State University, Department of Home Economics.

Hunnicutt, Jack R. et al. v. W. Lee Burge, et al. Individually and as members of the Board of Regents of the University System of Georgia. U. S. District Court, Middle District of Georgia, Macon Division #2754, March 22, 1973.

The Hunt Papers. Fort Valley State College Archives.

The Huntsville Times. AAMU Centennial Edition, 1975.

Hytche, William P. *A National Resource—A National Challenge: The 1890 Land-Grant Colleges and Universities*. (USDA, CSRS, pp. 12–13.

Interview with John Demons, Fort Valley State College, January 10, 1990.

Interview with President Richard D. Morrison, 1989.

Investing in Virginia's Future—A Program Report 1990. Petersburg, Virginia: Virginia State University, Cooperative Extension Service.

Jenkins, G. M. (1990). *Seafood Consumer Education and Utilization for the Family's Total Diet and Health*. College Park: University of Maryland, Eastern Shore.

Johnson, M. E. (1983) Clothing Construction and Recycling—South Carolina (1890). *(FY 83 Accomplishment Report*—NARS). Orangeburg: South Carolina State College, Cooperative Extension Service.

Johnson, M. E. (1983) Diet and Health—South Carolina *(1890, (FY 83 Accomplishment Report*—NARS). Orangeburg: South Carolina State College, Cooperative Extension Service.

Johnson, M. E. (1983) Home Based Skill Development in Home Improvement—South Carolina (1890). *(FY 83 Accomplishment Report*—NARS). Orangeburg: South Carolina State College, Cooperative Extension Service.

Johnson, M. E. (1983) Home Safety in Rural Areas—South Carolina (1890). *(FY 83 Accomplishment Report*—NARS). Orangeburg: South Carolina State College, Cooperative Extension Service.

Johnsrud, M. D. and Brook, H. M. (1990) Forward in *Serving People in Need: Cooperative Extension at the 1890 Land-Grant Universities*. Washington, D. C.: United States Department of Agriculture.

Jones, Thomas Jesse. *Negro Education: A Study of the Private and Higher Schools for Colored People in the United States*. Department of Interior, Bureau of Education Bulletin, 1916.

Kellum, R. (1990) *Historical Profile of Home Economics Programs at 1890 Colleges/Universities* (Rev.12/89) Langston, Oklahoma: Langston University, Department of Home Economics.

Kellum, R. (March 1990) Personal Communication. Langston, Oklahoma: Langston University, Department of Home Economics.

Kentucky State University Catalog (1988-1990. Frankfort, Kentucky: Kentucky State University.

Kidd, Charles C. *A Proposal to Establish the Cooperative Institute for International Policies Research and Education*, FAMU, Tallahassee, Florida, March 4, 1988.

King, R. V. (1990). *Information About the Cooperative Extension Program*. Langston, Oklahoma: Langston University, Cooperative Extension Program.

Klein, Arthur J. *Survey of Land-Grant Colleges and Universities*, Bulletin Vol. 2 No. 9. (Washington: Government Printing Office, 1930).

Klein, Arthur J. "Survey of Negro Colleges and Universities," *Bureau of Education Bulletin*, No. 7, U. S. Department of the Interior (Washington: Government Printing Office, 1928).

Kumelacnew, M. (1990) *Historical Profile of Home Economics Programs at 1890 Colleges/Universities* (Rev.12/89). Princess Anne, Maryland: University of Maryland: University of Maryland Eastern Shore, Department of Human Ecology.

Langston Univesity Catalog (1910, Langston, Oklahoma: Langston University.

Langston University, *1987 President's Annual Report.*

Laws of Georgia, No. 267 (House Bill No. 510) 1949.

Letter from Dr. Felton G. Clark, Southern University to Dr. Carl W. Borgmann, University of Vermont, October 29, 1953.

Letter from Professor Irving C. Peoples to Dr. Wilbert Greenfield, August 21, 1984.

Letter to President Lewis Webster Jones of the University of Arkansas, Fayetteville, from President P. B. Atwood of Kentucky State College and Secretary of the Conference of Presidents of Negro Land-Grant Institutions, November 8, 1949.

Letter to the Honorable Henry A. Wallace, Secretary of Agriculture, Washington, D. C., November 19, 1935.

Lincoln University Catalogue, 1988-1989.

Lloyd, R. Grann. *Tennessee Agricultural and Industrial State University, 1912-1962.* (Nashville, Tennessee: The University Press).

Lyons, Lorenza W. *Investing in Virginia's Future: Cooperative Extension Services.* Virginia State University, 1989, p. 4.

McCray, J. (1990) *1890 Extension Programs.* Personal Communication, Pine Bluff, Arkansas: University of Arkansas, Cooperative Extension Service.

McCray, J. (1988) *Barriers and Incentives toAffordable Housing* (Project No. ARK01191). Washington, D. C.: CRIS, USDA.

McCray, M. W. (1990) *Historical Profile of Home Economics Programs at 1890 Colleges/Universities* (Rev.12/89). Petersburg, Virginia: Virginia State University, Department of Human Ecology.

McGee, B. B. (1990) *Summary of Human Nutrition and Applied Food Research*, Baton Rouge, Louisiana: Southern University, Department of Human Nutrition and Food.

McGowan, Claude H. "Florida A&M University Provides State Leadership for Meat Goat Production Through Its Research and Extension Programs," The Continental, *FAMU Research and Extension Newsletter*, Vol. 2, No. 1 (May 1987) pp. 1-3.

Magee, Charles, "Why Black Americans Should Pursue Careers in Agricultural Sciences." *Agricultural Library Information Notes*, Vol. 15, No. 4, April 15, 1989.

Material provided by Dr. Leodrey Williams, Directory of Cooperative Extension Program, Southern University, 1990.

Material supplied by Bill Helvey, Communications Specialist, University Extension, University of Missouri/Lincoln University.

Mayberry, B. D. *A Brief History of Tuskegee University.* Unpublished materials, June 7, 1989.

Mayberry, B. D. *The Role of Tuskegee University in the Origin, Growth, and Development of the Negro Cooperative Extension System, 1881-1990.* (Tuskegee: Tuskegee University, 1989).

Mayberry, B. D. et al. *Development of Research At Historically Black Land-Grant 1890 Colleges and Universities*, 1976.

Mazyck, H. (March 1990) Personal communication. Greensboro, North Carolina: North Carolina A&T State University, Department of Home Economics.

Mazyck, H. (1990) Personal communication. Greensboro, North Carolina: North Carolina A&T State University, Department of Home Economics.

Meler, August. *Negro Thought in America, 1880–1915: Racial Ideologies in the Age of Booker T. Washington.* (Ann Arbor, 1963).

Memo from President R. B. Atwood to the Presidents of the Seventeen Land-Grant Institutions for Negroes.

Miller, J. R. (1986) Human Ecology Mandated Name Change at Virginia State University, Petersburg. J. Powell (Ed.) *Proceedings of the Joint Meeting of Association of Administrators of Home Economics National Council of Administrators* (pp. 30–31). Memphis, Tennessee.

The Morrill Act, (1862).

Morrison, Richard D. Personal Notes and Interview, 1989.

Morrison, Richard D. *Funding 1890 Land-Grant Institutions.* Unpublished manuscript, November 8, 1970.

Morrison, Richard D. *Background Materials Relating to Predominantly Negro Land-Grant Institutions.* (Normal, Alabama: Alabama A&M University, February 25, 1970.

Mosby, Gloria J. Communications Specialist, *History of the Cooperative Extension Program at Prairie View A&M University.* Unpublished manuscript.

Murray, Florence. *The Negro Handbook, 1946–1947,* New York.

NES Department of Natural Resources and Environmental Studies, Alabama A&M University, Unpublished report, May 1980.

Neal, E. G. (1990) *Historical Profile of Home Economics Programs at 1890 Colleges/Universities* (Rev.12/89) Pine Bluff, Arkansas: University of Arkansas, Department of Home Economics.

Nelson Amendment of March 4, 1907.

Newbold, N. C., et al. *Five North Carolina Negro Educators.* (Chapel Hill: University of North Carolina Press, 1939).

Neyland, Leedell W. and Riley, John W. *The History of Florida A&M University.* (Gainesville: University of Florida Press, 1965).

Neyland, Leedell W. *Florida A&M University: A Centennial History, 1887–1987.* (Tallahassee: Florida A&M University Foundation, Inc., 1987).

North Carolina A&T State University Catalog, 1957–1958.

North Carolina A&T State University Catalog, 1987.

Orr, Clyde L. "An Analytical Study of the Conference of Presidents of Negro Land-Grant College," Ph. D. Dissertation, University of Kentucky, 1959.

Pace, Ralphenia. (1990) Personal communication. Tuskegee, Alabama: Tuskegee University, Department of Home Economics.

Pancholy, S. K. Project Accomplishment Report. Mimeographed copy, Florida A&M University.

Parker, S. J. *A Brief Historical Development of the University of Arkansas at Pine Bluff with Emphasis on Land-Grant Status and Cooperative Research Program.* (Pine Bluff: University of Arkansas, Pine Bluff.

Patterson, Zella J. Black. *Langston University: A History*. (Norman: University of Oklahoma Press, 1979).

Payne, William, "Forgotten but Not Gone: The Negro Land-Grant Colleges." *Civil Rights Digest*, Vol. 3 No. 2 (Spring 1970) pp. 12–18.

Peabody, Frances G. *Education for Life*. (Garden City, New York: Doubleday, Page, and Co., 1926).

The Peach County Enterprise, July 20, 1972.

Phillis, Bobby R. ed. *A Resource Guide and Directory*, Association of Research Directors, 1989.

Plessy v. Ferguson, 163 U. S. 1138, (1986).

Policies and Procedural Guide. (1990) Fort Valley, Georgia: Fort Valley State College, Department of Home Economics.

Potts, Sr., John F. *A History of South Carolina State College*, 1896–1978. (Orangeburg: South Carolina State College, 1978).

Prairie View A&M University Catalog, 1986–1988.

Prairie View A&M University. *1988 Annual Report*. Cooperative Agricultural Research Center.

Price, Mayo. *Research Report*, Office of Dean Director, UAPB (Unpublished manuscript).

Princess Anne College Catalog, 1932–1933.

Proceedings of the Annual Conferences of the Presidents of Negro Land-Grant Colleges, 1932–1933, 1935–1938: including Ten Year History, 1923–1933, by Isaac Fisher.

Proceedings of the Conference of Presidents of Negro Land-Grant Colleges. Thirteenth Annual, Washington, D. C., November 18–20, 1935.

Proceedings of the Conference of the Presidents of the Negro Land-Grant Colleges. Fourteenth Annual, November 10–11, 1936: Part II: Ten Years of the Conference, 1923–1933, Petersburg, Virginia.

Proceedings of the Conference of Presidents of Negro Land-Grant Colleges. November 15–17, 1937.

Proceedings of the Conference of Presidents of Negro Land-Grant Colleges. Nineteenth Annual, Chicago, November 11–13, 1941.

Proceedings of the Conference of Presidents of Negro Land-Grant Colleges. Twentieth and Twenty-First Annual, June 12–14, 1942 and October 26–28, 1942.

Proceedings of the Conferences of Presidents of Negro Land-Grant Colleges (Special Session) Atlantic City, February 21–26, 1948.

Proceedings of the Conference of Presidents of Negro Land-Grant Colleges. Frankfort, Kentucky State College, October 17–19, 1950.

Proceedings of the Conference of Presidents of Negro Land-Grant Colleges. "The Emerging Role of Land-Grant Colleges for Negroes." Twenty-ninth Annual Session, Washington, D. C., October 16–18, 1951.

Proceedings of the National Association of State Universities and Land-Colleges. Washington, D. C.: Association Office, November 10–13, 1969.

Progress and Productivity Through Research and Service. (Washington: Association of Research Directors, The Cooperative State Research Service, USDA, June 1986).

Pruett, M. (1990). *Home Economics Extension Programs.* Dover, Delaware: Delaware: Delaware State College, Department of Agriculture and Natural Resources.

Quarles, Benjamin. *The Negro in the Making of America.* (New York: Collier Books, 1964.

Rasmussen, Wayne D. *Taking the University to the People.* (Ames, Iowa: Iowa State University Press, 1989.

Research, Agriculture, and Applied Sciences Bulletin. (Lorman, Mississippi: Alcorn State University).

Research and Extension News, Fall 1988, Vol. 2, No. 5. South Carolina State College.

Research Program, Fort Valley State College, Agricultural Research Station, School of Agriculture, Home Economics and Allied Programs, October 1988.

Retrospect '83. North Carolina A&T State University—Extension/ Research Communication, 1983.

Retrospect '85. North Carolina A&T State University—Extension/ Research Communication, 1985.

Ross, Earle D. *The Land-Grant Idea at Iowa State College.* (Ames, Iowa: The Iowa State College Press, 1958).

Savage, W. Sherman. *The History of Lincoln University.* (Jefferson City, Missouri: The New Day Press, 1939).

Schor, Joel. *Agriculture in the Black Land-Grant System to 1930.* (Tallahassee: Florida A&M University, 1982).

Schor, Joel. *The Black Presence in U. S. Cooperative Extension Service to 1988: A Profile.* (Unpublished manuscript, 1983).

Schor, Joel; Simpson, Ocieris; and Mayberry, B. D. (Eds.) *A Century of Agriculture in the 1890 Land-Grant Colleges and Universities, 1890–1990: A Stampede for Equality.* (Unpublished manuscript, 1989).

The Scope: Agricultural Research Program. North Carolina A&T State University, Spring 1987.

Scott, Emmett J. and Stowe, Lyman B. *Booker T. Washington: Builder of a Civilization.* (Garden City, New York: Doubleday, Page and Company.

Seals, R. Grant. "Analysis of Land-Grant Institutions in Louisiana: Louisiana State University and Southern University." Unpublished manuscript, August 1981.

Seals, R. Grant. "Educational Status of Blacks in U. S. Agriculture." *NACTA Journal*, Vol XXIII, March 1978.

Serving People in Need: Cooperative Extension at the 1890 Land-Grant Universities. Washington, D. C.: United States Department of Agriculture.

Serving the World: The People and Ideas of America's State and Land-Grant Universities. (Washington, D. C.: National Association of State Universities and Land-Grant Colleges, 1987.

Shelton, G. (1988) *Barriers and Incentives to Affordable Housing* Project No. NC-070-5-85-170-1). Washington, D. C.: CRIS, USDA.

Short Course in Goat Management Practices. Cooperative Agriculture Research Center, Prairie View A&M University.

Simpson, Ocleris. "Knowledge for Reaching Out and Helping Others," Research and Extension, *1987 President's Annual Report*, Langston University, p. 25.

Slaughter House Cases, 16 Wall 36, 1873.

Smith-Hughes Act, Sixty-fourth Congress, February 23, 1917.

South Carolina State College Catalogue (1988-1989) Orangeburg, South Carolina: South Carolina State College.

South Carolina State College Self-Study, Part II, Division of Agriculture South Carolina State College, 1970.

Southern Education Report, Vol. 8, May 1969.

Southern University and A&M College, College of Agriculture, "A Report to the President," April 3, 1970. Southern University Archives.

Spencer, Jr., Samuel R. *Booker T. Washington and the Negro's Place in American Life.* (Boston: Little, Brown, and Co., 1955).

Spruill, Albert W. *Great Recollections from Aggieland.* (Greensboro: Whitehead Printing Co., 1964).

Staff. (June 1984) "A&T Extension Receives March of Dimes Grant," *Dimensions.* Greensboro: North Carolina A&T State University, Agricultural Extension Programs.

Staff. April 1986) "Eating Nutritiously Makes Health, Happy Babies," *Dimensions*, Greensboro: North Carolina A&T State University, Agricultural Extension Programs.

Staff. (1988) *Extension Annual Report*, 1988. Prairie View, Texas: Prairie View A&M University, Cooperative Extension Program.

Staff. (Fall 1989) "Funding Received for Employment Planning Program," *VSU Connection.* Petersburg: Virginia State University, Cooperative Extension Service.

Staff. (1979) "Home Economics," *Retrospect, 1979.* Greensboro: North Carolina A&T State University, Agricultural Extension Program.

Staff. (1980) "Home Economics," *Retrospect, 1980.* Greensboro: North Carolina A&T State University, Agricultural Extension Program.

Staff. (1988) "Home Economics," *Retrospect, 1988*, Greensboro: North Carolina A&T State University, Agricultural Extension Programs.

Staff. (1988) *Lincoln University (Extension and Research Annual Report, 1988).* Jefferson City, Missouri: Lincoln University, Cooperative Extension Program.

Staff. (1989) *Lincoln University, '89 (Extension and Research Annual Report*, (1989). Jefferson City, Missouri: Lincoln University, Cooperative Extension Program.

Staff. (1986) *1986—A Year in Review*. Petersburg, Virginia: Virginia State University, Cooperative Extension Service.

Stallworth, Houston. *History of Research at Fort Valley State College.* Unpublished manuscript, 1976.

Statement of Presidents of Land-Grant College for Negroes as presented to Honorable Harry S. Truman, President of the United States at the White House, October 22, 1946.

Supplement to the Mississippi Cooperative Extension Service, 1972 Fiscal Year Plan of Work for Work to be Performed by the Alcorn A&M College Branch of MCEA. Unpublished manuscript.

Tennessee State University Catalog (1987–1989). Nashville, Tennessee: Tennessee State University.

Toppin, Edgar A. *Virginia State University: A Century of Service.* (Petersburg, Virginia: Virginia State University CPS Systems, 1983).

Troup, C. V. "The Story of Otis S. O'Neal, Father of the Fort Valley Ham and Egg Show," *Negro Educational Review*, Vol. 4 (April 1953) pp. 64–67.

Tulsa World. Saturday, January 6, 1990.

U. S. Bureau of Census. *Negroes in the United States*, 1920–1932. Washington, D. C.: Department of Commerce, 1935.

U. S. Bureau of the Census. *Negro Populations, 1790–1915.*

U. S. Department of Agriculture. "On the Road—with Technology," *Extension Review* (Winter 1989) pp. 14–15.

U. S. Department of Education, National Center for Education Statistics, Washington, D. C. June 1989, pp. 243, 246, 249.

U. S. Department of Interior, Bureau of Education. *Negro Education: A Study of the Private and Higher Schools for Colored People in the United.* Bulletin Vol. II, 1916, No. 38 (Washington, D. C.: Government Printing Office, 1917).

U. S. Department of Interior, Bureau of Education. *Survey of Land-Grant Colleges and Universities*, Bulletin Vol. II, No. 9, Part X, 1930.

U. S. Office of Education Bulletin. Washington, D. C. No. 9, 11, 1930.

U. S. Office of Education Pamphlet, No. 15, November 1930.

U. S. Office of Education Bulletin, No. 2, 1935.

U. S. Office of Education Bulletin, 1937.

U. S. Patent, Charles Magee, "Fruit and Vegetable Pre-Cooling Shipping and Storage Container," July 11, 1989.

U. S. Statutes at Large, Vol. 26, p. 417.

U. S. v Cruikshank, 23 L. Ed., 588, (1876).

UAPB Discovery, University of Arkansas at Pine Bluff Research Center, March 1989.

University of Maryland Eastern Shore Catalog 1989-1992. Princess Anne, Maryland: University of Maryland Eastern Shore.

University of Maryland Eastern Shore, *School of Agricultural Sciences Annual Report*, 1984.

Van Wright, Jr., Aaron. "The Negro Land-Grant Institutions." *Improving College and University Teaching*, Vol. XV, No. 4, Autumn 1967.

Vaughn, G. G. (February 1990) *Minority Leadership Development*. Paper presented at the annual meeting of the National Council of Administrators of Home Economics, Newport Beach, California.

Vincent, Charles. *A Centennial History of Southern University and A&M College, 1880-1980*. (Baton Rouge): Southern University, 1981).

Vincent, Charles. *Southern University and A&M College: Its Agricultural Development*. Unpublished manuscript.

The Virginia Statesman. Friday, January 20, 1970.

Walston, H. (1990) *Historical Profile of Home Economics Programs at 1890 College/Universities* (Rev.12/89). Frankfort, Kentucky: Kentucky State University, Department of Home Economics.

Washington, Booker T. *Tuskegee and Its People*, (New York: D. Appleton and Co., 1910).

Washington, Booker T. *Up From Slavery*. (New York: Doubleday, Page, and Co., 1933).

The Washington Post, March 3, 1977.

Williams, Harriet R. *A Brief History of Delaware State College* (Unpublished manuscript) 1989.

Woodward, I. C. Vann. *The Strange Career of Jim Crow*. (New York: Oxford University Press, 1966).

Woolfolk, George Rubie, *Prairie View: A Study in Public Conscience, 1878-1945*. (New York: Pageant Press, Inc., 1962).

Young, N. B., "Three Colored United State," *The Messenger*, November 1923, pp. 866-867.

Young, Ruth H. *Campus in Transition*. (New York: The Ford Foundation, 1981).

CHAPTER ONE FOOTNOTES

[1] Earle D. Ross, *The Land-Grant Idea at Iowa State College*. (Ames, Iowa: The Iowa State College Press, 1958) p.3.

[2] *The Morrill Act, 1862*.

[3] As quoted in George Ruble Woolfolk, *Prairie View: A Study in Public Conscience, 1878–1946*. (New York: Pageant Press, Inc., 1962) pp. 21-23.

[4] See William Payne, "The Negro Land-Grant College," *Civil Right Digest*, Vol. 3, No. 2. (Spring 1970) p. 12.

[5] John F. Potts, Sr., *A History of South Carolina State College, 1896–1978*. (Orangeburg: South Carolina State College, 1978) p. 8.

[6] Benjamin F. Andrews, *The Land Grant of 1862 and the Land Grant College*. (Washington: Government Printing Office, 1918) p. 26.

[7] James W. Garner, *Reconstruction in Mississippi*. (Baton Rouge: Louisiana State University Press, 1968) p. 370.

[8] Melerson Guy Dunham, *Centennial History of Alcorn A&M College*. (Hattiesburg: University and College Press of Mississippi, 1971) p. 17.

[9] *Ibid* p. 18.

[10] *Ibid*, p. 19.

[11] Dunham, *op.cit.*, p. 19.

[12] *Ibid.*

[13] Davis, *op.cit.*, p. 17.

[14] Dunham, *op.cit.*, p. 31.

[15] *Ibid*, p. 47.

[16] Joel Schor, *Agriculture in the Black Land-Grant system to 1930*. (Tallahassee: Florida A&M University, 1982) p. 13.

[17] Milan Davis, *Pushing Forward*. Okolona, Miss. The Okolona industrial School, 1938, p. 48.

[18] Joel Schor, *Agriculture in the Black Land-Grant system to 1930*. (Tallahassee: Florida A&M University, 1982) p. 13.

[19] *Ibid*, p. 19.

[20] Dwight O. W. Holmes, *The Evolution of The Negro College*. (New York: The Teachers College, Columbia University, 1934) p. 85.

[21] *Ibid*, p. 86.

[22] Davis, *op.cit.*, p. 18. (In 1920, the land-grant funds were transferred from Hampton to the Virginia State College for Negroes at Ettricks, Virginia.)

[23] *U. S. Office of Education Bulletin*, Washington, D.C., (1930) No. 9, II, p. 838.

[24] W. N. Hartshon (Ed.) and George W. Penriman, *An Era of Progress and Promise*, 1863–1910. (Boston: The Priscilla Publishing Co, 1910) pp. 316-317.

[25] *Ibid*, p. 17.

[26] Francis G. Peabody, *Education for Life*. (Garden City, NY: Doubleday, Page and Co., 1926) p. 243.

[27] See Booker T. Washington, *Up From Slavery*. (New York: Doubleday, Page and Company, 1933).

[28] Hartshon and Penriman, *op.cit.*, p. 317.

[29] As cited in John F. Potts, Sr., *A History of South Carolina State College*. (Orangeburg: South Carolina State College, 1978) p. 3.

[30] *Ibid*, p. 17.

[31] Davis, *op.cit.*, p. 17.

[32] Potts, .*op.cit.*, p. 136.

[33] John A. Hardin, *Onward and Upward: A Centennial History of Kentucky State University.* (Frankfort: Kentucky State University, 1987).

[34] Davis, *op.cit.*, pp. 15-16.

[35] Davis, *op.cit.*, p. 15.

[36] Harden, *op.cit.*, p. 8.

[37] *Ibid*, p. 9.

CHAPTER TWO FOOTNOTES

[1] I. C. Vann Woodward, *The Strange Career of Jim Crow.* (New York: Oxford University Press, 1966). 69–70.

[2] *Slaughter House Cases*, 16 Wall 36 (1873).

[3] *U. S. v. Cruikshank*, 23 L. Ed., 588 (1876).

[4] *Hall v. DeCuir*, 24 L. Ed., 547 (1878).

[5] *Civil Rights Cases*, 109 U. S. 3, 25 (1883).

[6] *Plessy v. Ferguson*, 163 U. S. 1138 (1896).

[7] Benjamin Quarles, *The Negro in the Making of America.* (New York: Collier Books, 1964) p. 144.

[8] Leedell W. Neyland and John W. Riley, *The History of Florida Agricultural and Mechanical University.* (Gainesville: University of Florida Press, 1965) p. 34.

[9] Melerson Guy Dunham, *Centennial History of Alcorn A&M College.* (Hattiesburg: University College Press of Mississippi, 1971) p. 27.

[10] *Daily Herald*, 1885.

[11] Charles Vincent, *A Centennial History of Southern University and A&M College, 1880–1980.* (Baton Rouge: Southern University, 1981) p. 12.

[12] As quoted in Joel Schor, *The Black Presence in U. S. Cooperative Extension Service to 1983: A Profile* (Unpublished Manuscript, 1983) p. 3.

[13] Edward Danforth Eddy, Jr., *Colleges for Our Land and Time: The Land-Grant Idea in American Education.* (New York: Harper and Brothers, 1957) p.

[14] John W. Davis, *Land-Grant Colleges for Negroes.* (Institute: West Virginia State College Bulletin, Ser. 21, No. 5, April 1934) p. 12.

[15] *U. S. Statutes at Large*, Vol. 26, p. 417.

[16] *Ibid.*

[17] Arthur J. Klein, *Survey of Land-Grant Colleges and Universities*, Bulletin 1930, No. 9, Vol. II, Part X (Section of Bulletin), p. 843, Department of Interior, Office of Education. See Bureau of Census, Negro Population, 1790–1915. (Washington, D.C.: U. S. Government Printing Office, 1918) *passim.*

[18] Davis, *passim.*

[19] Klein, *Op. cit.*, pp. 840–841.

[20] Davis, *op. cit.*, p. 20.

[21] *Serving the World: The People and Ideas of America's State and Land-Grant Universities.* (Washington, D.C.: NationalR00NEon of State Universities and Land-Grant Colleges, 1987) p. 295.

[22] *Lincoln University Catalogue*, 1988-1989, p. 5.

[23] Davis, *op. cit.*, p. 17.

[24] W. Sherman Savage, *The History of Lincoln University*. (Jefferson City, MO: The New Day Press, 1939) pp. 100-102.

[25] *Ibid*, p. 167.

[26] *Ibid.*

[27] Jenie P. Guzman, et al. *The Negro Year Book* (Tuskegee Institute) 1941-46, p. 94.

[28] Schor, *op. cit., p. 55.*

[29] *Savage, op. cit.*, p. 216.

[30] John F. Potts, Sr., *A History of South Carolina State College.* (Orangeburg: South Carolina State College, 1978) p. 12.

[31] *Ibid.*

[32] *Ibid*, p. 21.

[33] *Ibid.*

[34] *Ibid.*

[35] *Ibid*, p. 50.

[36] Klein, *op. cit*, p. 964.

[37] Alexander, E. L. *Centennial History of Arkansas A. M. and N. College.* 1983-1973. Pine Bluff (Unpublished manuscript) 1973. pp. 36-37.

[38] Davis, *op. cit.*, p. 14.

[39] As quoted in Alexander, *op. cit.*, p. 25.

[40] *Ibid.*

[41] *Ibid*, p. 42.

[42] *Ibid*, p. 16-17.

[43] *Ibid*, p. 20.

[44] *The Huntsville Times*, AAMU Centennial Edition, 1975, p. 4.

[45] *Ibid*, p. 5.

[46] *Ibid.*

[47] Davis, *op. cit.*, pp. 13-14.

[48] *Ibid.*

[49] Schor, *op. cit.*, p. 69.

[50] *Ibid*, p. 70.

[51] *Catalog of Prairie View A&M University*, 1986-1988, p. 16.

[52] George Ruble Woolfolk, *Prairie View: A Study in Public Conscience, 1987-1946.* (New York: Pageant Press, 1962) pp. 43-45.

[53] *Ibid*, p. 45.

[54] Schor, *op. cit.*, p. 72.

[55] Davis, *op. cit.*, p. 18.

[56] Woolfolk, *op. cit.*, p. 201.

[57] *Ibid.*

[58] *Catalog of Prairie View A&M University*, 1986-1988, p. 11.

[59] *Ibid*, p. 17.

[60] Vincent, *op. cit.*, p. 9.

[61] *Ibid*, p. 11.

[63] Schor, *op. cit.*, p. 82.

[64] Vincent, *op. cit.*, pp. 40–41.

[65] Charles Vincent, *Southern University and A&M College: Its Agricultural Development.* (Unpublished Manuscript.)

[66] *Ibid.* p. 12.

[67] *Baton Rouge State Times*, June 30, 1916.

[68] Vincent, *op. cit.*, p. 121.

[69] *Ibid*, p. 144.

CHAPTER THREE FOOTNOTES

[1] Emmett J. Scott and Lyman B. Stowe, *Booker T. Washington: Builder of a Civilization.* (Garden City, NY: Doubleday, Page & Co.) pp. 3–4.

[2] Cited by Louis R. Harlan, *Booker T. Washington Papers.* (Urbana: University of Illinois Press, 1956). Vol. III, pp. 274–275.

[3] Addie L.J. Butler, *The Distinctive Black College: Talladega, Tuskegee and Morehouse.* (London: The Scarecrow Press, 1977) p. 60.

[4] *Ibid*, p. 61.

[5] Booker T. Washington, *Tuskegee and Its People.* (New York: D. Appleton and Co., 1910) pp. 56–57.

[6] Samuel R. Spencer, Jr. *Booker T. Washington and the Negro's Place in American Life.* (Boston: Little, Brown, and Co., 1955) pp. 64–65.

[7] Henry A. Bullock, *The History of Negro Education in the South.* (Cambridge: Howard University Press, 1967) pp. 84–85.

[8] *Ibid*, p. 85.

[9] Booker T. Washington, *Up From Slavery.* (New York: Doubleday, Page and Company, 1933) pp. 220–223.

[10] *Ibid.*

[11] *Ibid.*

[12] *Ibid.*

[13] John W. Allen,"The Role of Tuskegee Institute in the Education of Black Farmers." *Journal of Negro History*, Vol. 60 (April 1978) pp. 252–257.

[14] Joel Schor, *The Black Presence in U.S. Cooperative Extension Service to 1983: A Profile.* (Unpublished Manuscript, 1983) pp. 28–29.

[15] Addie L.J. Butler, *op. cit.*, p. 70.

[16] *Ibid*, p. 90.

[17] Edgar A. Toppin, *Virginia State University: A Century of Service.* (Virginia State University CPS Systems: Petersburg, Virginia, 1983) p. 6.

[18] *Ibid*, p. 4.

[19] Schor, *op. cit.*, p. 114.

[20] John M. Gandy, "The Program of Education at Virginia State College: Vindication." *Virginia State Gazette*, 45: 3–9, December 1939.

[21] M.A. Fields and M.T. Carter, *History of Agricultural Curriculum and Randolph Farm.* (Unpublished mimeographed paper) p. 11.

[22] *Ibid*, p. 2.

[23] Ruth H. Young, *Campus in Transition*. (New York: The Ford Foundation, 1981) p. 1.

[24] *Princess Anne College Catalog*, 1923–1933.

[25] *Ibid.*

[26] Leedell W. Neyland and John W. Riley, *The History of Florida A&M University*. (Gainesville: University of Florida Press, 1965) p. 20.

[27] *Ibid*, pp. 24–25.

[28] *Ibid*, p. 22.

[29] *Ibid*, p.

[30] *Ibid*, p. 63.

[31] *Ibid*, p. 68.

[32] Leedell W. Neyland, *Florida A&M University: A Centennial History, 1887–1987*. (Tallahassee: FAMU Foundation, Inc., 1987) p. 33.

[33] N. B. Young, "These Colored United States," *The Messenger* (November 1923) pp. 866–867.

[34] Arthur J. Klein, "Survey of Negro Colleges and Universities," *Bureau of Education Bulletin*. U.S. Department of Interior (1928) No. 7, Washington, D.C. (GPO) p. 964.

[35] U. S. Department of Interior, Bureau of Education, *Negro Education: A Study of the Private and Higher Schools for Colored People in the United States*. Bulletin, 1916, Vol. 2, No. 39. Reprinted (New York: Negro Universities Press, 1969) 724 pp.

[36] Klein, *op. cit.*, p. 964.

[37] *North Carolina A&T State University Catalog*, 1987.

[38] *Ibid.*

[39] Albert W. Spruill, *Great Recollections from Aggieland*. (Greensboro: Whitehead Printing Co., 1964) p. 2.

[40] N. C. Newbold, et al. *Five North Carolina Negro Educators*. (Chapel Hill: University of North Carolina Press, 1939) p. 44.

[41] Spruill, *op. cit.*, p. 23.

[42] *Ibid.*

[43] Joel Schor, *Agriculture in the Black Land-Grant System to 1930*. (Tallahassee: Florida A&M University, 1982) p. 138.

[44] Louis R. Harlan, *Separate and Unequal*. (Chapel Hill: University of North Carolina Press, 1958) p. 134.

[45] Schor, *op. cit.*, p. 135.

[46] John W. Davis, *Land-Grant Colleges for Negroes*. (Institute: West Virginia State College Bulletin, Ser. 21, No. 5, April 1934) p. 15.

[47] *Savannah State College Bulletin*, 1981–1982, p. 15.

[48] *Ibid*, pp. 9–10.

[49] *Laws of Georgia*, No. 267 (House Bill No. 510) 1949.

[50] *Ibid.*

[51] *Ibid.*

[52] Zella J. Black Patterson, *Langston University: A History* (Norman: University of Oklahoma Press, 1979) p. 15.

[53] *Ibid*, p. 78.

[54] *Ibid*, p. 210.

[55] *Ibid*, p. 158.

[56] *Ibid.*

[57] John W. Davis, *Land-Grant Colleges for Negroes.* (Institute: West Virginia State College Bulletin, Ser. 21, No. 5, April 1934) p. 17.

[58] R. Grann Lloyd, *Tennessee Agricultural and Industrial State University, 1912–1962.* (Nashville, TN: The University Press) 73 pp.

[59] *Ibid*, p. 7.

[60] *Ibid*, pp. 23–24.

[61] Davis, *op. cit.*, p. 19.

[62] Schor, *passim.*

[63] John E. Brewton, *Higher Education in West Virginia: A Survey Report.* (West Virginia: Charleston, 1956) pp. 107–110.

CHAPTER FOUR FOOTNOTES

[1] Joel Schor, *Agriculture in the Black Land-Grant System to 1930.* (Tallahassee: Florida A&M University, 1982) pp. 157–158.

[2] Clyde L. Orr, *An Analytical Study of the Conference of Presidents of Negro Land-Grant Colleges* (Unpublished dissertation, Lexington, Kentucky: University of Kentucky, 1959) p. 12.

[3] *Ibid.*

[4] *Proceedings of the Annual Conferences of the Presidents of Negro Land-Grant Colleges, 1932–1933, 1935–1938; including Ten-Year History, 1923–1933*, by Isaac Fisher, p. 3.

[5] Orr, *op. cit.*, p. 14.

[6] *Proceedings of the Fourteenth Annual Conference of the Presidents of the Negro Land-Grant Colleges, November 10–11, 1936, Part II: Ten Years of the Conference, 1923–1933*, Petersburg, Virginia.

[7] *Ibid*, pp. 98–99.

[8] *Proceedings of the Thirteenth Annual Conference of Presidents of Negro Land-Grant Colleges*, Washington, D. C. (November 18–20, 1935) p. 6.

[9] *Ibid*, p. 29.

[10] *Ibid*, p. 46.

[11] Letter to the Honorable Henry A. Wallace, Secretary of Agriculture, Washington, D. C., dated November 19, 1935.

[12] John W. Davis, *Land-Grant Colleges for Negroes.* (Institute: West Virginia State College Bulletin, 1934) Series 21, No. 5.

[13] *Proceedings of the Nineteenth Annual Conference of Presidents of Negro Land-Grant Colleges*, Chicago: November 11, 12, 13, 1949. pp. 31–33.

[14] *Ibid*, p. 34.

[15] *Ibid*, p. 33.

[16] *Proceedings of the Twentieth and Twenty-first Conferences of Presidents of Negro Land-Grant Colleges*, June 12–14, 1942 and October 26–28, 1942, pp. 9–24.

[17] *Ibid.*

[18] *Ibid*, p. 15.

[19] *Ibid.*

[20] *Ibid.* p. 15.

[21] Statement of Presidents of Land-Grant Colleges for Negroes as presented to Honorable Harry S. Truman, President of the United States at the White House, October 22, 1946.

[22] *Ibid.*

[23] *Proceedings of the Conference of the Presidents of Negro Land-Grant Colleges* (Special Session) Atlantic City: February 21–26, 1948, p. 103.

[24] Letter to President Lewis Webster Jones, President of the University of Arkansas, Fayetteville, Arkansas from President R. B. Atwood, Kentucky State College and Secretary of the Conference, dated November 8, 1949.

[25] *Proceedings of the Conference of Presidents of Negro Land-Grant Colleges.* (October 17–19, 1950) Frankfurt, Kentucky State College, p. 34.

[26] *Ibid.*, p. 34.

[27] "The Emerging Role of Land-Grant Colleges for Negroes," *Proceedings of the Conference of Presidents of Negro Land-Grant Colleges.* Frankfurt, KY: October 16–18, 1951, pp. 28–29.

[28] The Emerging Role of Land-Grant Colleges for Negroes. (Twenty-ninth Annual Session, Washington, D. C.) October 16–18, 1951, p. 83.

[29] Memo from President R. B. Atwood to the Presidents of the Seventeenth Land-Grant Institutions for Negroes.

[30] Felton G. Clark, "What are the Negro Land-Grant Colleges Doing to Fabricate a Program to Meet Present-Day Needs," *Proceedings of the Conference of Presidents of Negro Land-Grant Colleges*, October 21–23, 1952, pp. 67–72.

[31] *Ibid.*

[32] *Ibid*, p. 69.

[33] *Ibid.*

[34] Letter from Dr. Felton G. Clark, Southern University, to Dr. Carl W. Borgmann, University of Vermont, dated October 29, 1953.

[35] R. P. Daniels, Special Report Relating to the Present and Future Status of Presidents of Negro Land-Grant Colleges, dated November 17, 1955.

CHAPTER FIVE FOOTNOTES

[1] John W. Davis, *Land-Grant Colleges for Negroes* . (Institute: West Virginia State College Bulletin, Series 21) April 1934, p. 23.

[2] Nelson Amdendment of March 4, 1907. (See U. S. Office of Education Pamphlet, No. 15, Nov. 1930).

[3] O. J. Chapman, *A Historical Study of Negro Land-Grant Colleges in Relationship with Their Social, Economic, Political, and Educational Backgrounds and a Program for Their Improvement* . Unpublished dissertation, Ohio State University, 1940.

[4] Leedell W. Neyland and John W. Riley, *The History of Florida A&M University* . (Gainesville: University of Florida Press, 1963), p. 66.

[5] Charles Vincent, *Southern University and A&M College: Its Agricultural Development* . Unpublished manuscript, 1989, p. 9.

[6] Thomas Jesse Jones, *Negro Education: A Study of the Private and Higher Schools for Colored People in the United States* . (Department of Interior, Bureau of Education Bulletin, 1916).

[7] Smith-Hughes Act, Sixty-fourth Congress, February 23, 1917.

[8] Chapman, *op. cit* ., p. 111.

[9] *Ibid*, p. 113.

[10] Neyland and Riley, *op. cit.*, passium.

[11] *U. S. Bureau of Education Bulletin*, 1916, 1930, 1935, 1937.

[12] *U. S. Bureau of Education Bulletin*, 1935, No. 2, p. 468.

[13] Chapman, *op. cit.*, p. 116.

[14] Edward Danforth Eddy, Jr., *Colleges for Our Land and Times: The Land-Grant Idea in American Education.* (New York: Harper and Brothers 1956) pp. 261-262.

[15] *Proceedings of the National Association of State Universities and Land-Grant Colleges.* (Washington, D.C.: Association Office, Nov. 10 -13, 1969), p. 173.

[16] B. B. Archer, *Accomplishments in Agricultural Science at Virginia State University.* (Unpublished manuscript, 1990) p. 2.

[17] R. Grant Seals, "Educational Status of Blacks in U. S. Agriculture," *NACTA Journal.* (March 1978, Vol. XXIII) p. 19.

[18] *Ibid.*

[19] Charles Magee, "Why Black Americans Should Pursue Careers in Agricultural Sciences," *Agricultural Library Information Notes.* Vol. 15, No. 4, April 15, 1989.

[20] Seals, *op. cit.*

[21] Jennie P. Guzman, et al. *Negro Year Book*, 1941–46, p. 97; Florence Murray, *The Negro Handbook*, 1946–47 (New York, 1947). pp. 50–53.

[22] Leedell W. Neyland, *Florida Agricultural and Mechanical University: A Centennial History (1887-1987).* (FAMU Foundation:Tallahassee), p. 184.

[23] Jessie P. Guzman, *op. cit.* 1941–46, p. 97.

[24] *Proceedings of the Fifteenth Annual Conference of the Presidents of Negro Land-Grant Colleges*, November 15–17, 1937, pp. 96–97.

[25] Aaron Van Wright, Jr., "The Negro Land-Grant Institutions," *Improving College and University Teaching.* Vol. XV, No. 4 (Autumn 1967), p. 258.

[26] Eddy, *op. cit.*, p. 261.

[27] Magee, *op. cit.*, p.

[28] *Ibid.*

[29] Enterprise, Alabama Brochure, The Chamber of Commerce, 1988.

[30] B. D. Mayberry, *A Brief History of Tuskegee University.* (Unpublished materials) June 7, 1989.

[31] Houston Stallworth, *History of Research of Fort Valley State College.* Division of Agriculture, 1976.

[32] Centennial Accomplishments Report, *A People and a Spirit Serving the Nations of the World*, Alabama A&M University, (1890 Land-Grant Centennial Publishers, 1990).

[33] *North Carolina A&T State University Catalog*, 1957-1958.

[34] *Commemorative Papers from the Iowa State College Centennial.*(Ames, Iowa: Iowa State College Press, 1958) p. 26.

CHAPTER SIX FOOTNOTES

[1] B. D. Mayberry, et al. *Development of Research at Historically Black Land-Grant Institutions.* (1976: Assn. of Research Directors, Land-Grant 1890 Colleges and Universities), p. 42.

[2] *Ibid*, p. 4.

[3] *Progress and Productivity Through Research and Service.* (Washington: Assn. of Research Directors, The Cooperative State Research Service, USDA. June 1986), p. 5.

[4] B. D. Mayberry, et al., *op. cit.*, p. 52.

[5] Interview with President Richard D. Morrison, 1989.

[6] *Ibid.*

[7] Mayberry, et al., *op. cit.*, p. 51.

[8] *Ibid*, p. 52. (The Committee suggested by the Secretary consisted of L. C. Dowdy, North Carolina A&T; Lawrence Davis, Arkansas AM&T; L. H. Foster, Tuskegee Institute; B. D. Mayberry, Tuskegee Institute; R. D. Morrison, Alabama A&M; G. Leon Netterville, Jr., Southern University; A. I. Thomas, Prairie View A&M.)

[9] Richard D. Morrison, Personal Notes and Interview, 1989.

[10] Richard D. Morrison, *Funding 1890 Land-Grant Institutions* (Unpublished Manuscript) November 8, 1970, pp. 1–5.

[11] Richard D. Morrison, *Background Materials Relating to Predominantly Negro Land-Grant Institutions.* (Normal, Alabama: Alabama A&M University, February 25, 1970), p. 4.

[12] *Southern Education Report*, Volume 8, May 1969, p. 8.

[13] William Payne, "The Negro Land-Grant Colleges." *Civil Rights Digest*, Spring 1970, passium.

[14] Richard D. Morrison, *op. cit.*, p. 5.

[15] *Progress and Productivity Through Research and Service, op. cit.*, p. 5.

[16] Bobby R. Phills, ed. *A Resource Guide and Directoy*, Association of Research Directors, 1989, p. 1. (ARD Charter Members: Earl V. Algood, Virginia State University; Cozy Ellison, Fort Valley State College; William J. Flemming, Kentucky State University; James N. Freeman, Lincoln University; David Hamilton, Tennessee State University; Robert Hurst, South Carolina State College; Richmond Kinnard, Langston University; James I. Kirkwood, Prairie View A&M University; B. D. Mayberry, Tuskegee University; McKinley Mayes, Southern University; Jesse A. Morris, Alcorn State University; S. J. Parker, University of Arkansas at Pine Bluff; William L. Peters, Florida A&M University; Howard Robinson, North Carolina A&T State University; Winfred Thomas, Alabama A&M University; and Joseph Wuton, University of Maryland, Eastern Shores.)

[17] Mayberry, *op. cit.*, p. 55.

[18] *Progress and Productivity Through Research and Service, op. cit.*, p. 4.

[19] J. S. Dhillon, *An Overview of Social Science Research at Historically Black Land-Grant Colleges and Universities (1890 Institutions)* Unpublished Manuscript. Director, Center for Community Development and Research, Department of Sociology, Anthropology, and Human Services, FAMU. Presented at the Annual Rural Sociological Society, Cornell University, August 22, 1980, pp. 5–9.

[20] *Ibid*, p. 6.

[21] *Ibid*, p. 8.

[22] *Ibid.*

[23] Jogindar S. Dhillon and Marguerite R. Howie (eds.) *Dimensions of Poverty in the Rural South*. Tallahassee: Florida A&M University, 1986.

[24] *Ibid.*

[25] Lewis Berner and Manuel L. Pescador, *The Mayflies of Florida*. (Revised Edition). Tallahassee and Gainesville: University Presses of Florida, 1988.

[26] K. Pancholy, "Project Accomplishment Report" (mimeographed copy) Florida A&M University.

[27] Research Program, Fort Valley State College, Agricultural Research Station, School of Agriculture, Home Economics and Allied Programs, (October 1988) p. 4.

[28] United States Patent, Charles Magee, "Fruit and Vegetable Pre-Cooling Shipping and Storage Container," July 11, 1989, pp. 1–6.

[29] *Research Programs, Fort Valley State College*, op. cit., p. 7.

[30] "A Century of Service 1985–86 Annual Report of Raymond M. Burse, President." Kentucky State University, October 22, 1887, p. 17.

[31] Highlights of the Kentucky State Community Research Service Program, Bulletin No. 1, 1982, p. 2.

[32] A Century of Service, *op. cit.*, pp. 17–18.

[33] *Ibid*, p. 18.

[34] *Agri-News*, Alabama A&M University, School of Agriculture, Environmental Science and Home Economics. (November 1984) p. 1.

[35] NES Department of Natural Resource and Environmental Studies, Alabama A&M University. (Unpublished Report) May 1980, p. 93.

[36] Research, Agriculture, and Applied Sciences. (Lorman, Mississippi: Alcorn State University) A Bulletin, pp. 2–4.

[37] J. B. Collins, *Alcorn State University Branch Experiment Station: A Brief History*. (Unpublished Manuscript, Alcorn State University, 1988) pp. 1–2.

[38] *Ibid*, p. 3.

[39] *Ibid*, pp. 3–4.

[40] Short Course in Goat Management Practices. Cooperative Agriculture Research Center, PVAMU, p. 2.

[41] 1988 Annual Report. Prairie View A&M University, Cooperative Agricultural Research Center, p. 10.

[42] *Ibid.*

[43] *Retrospect '83*. North Carolina A&T University—Extension/Research Communication, 1983, p. 3.

[44] *Ibid*, p. 2.

[45] *The Scope: Agricultural Research Program*. North Carolina A&T University, Spring 1987, p. 7.

[46] *Ibid.*

[47] *Ibid.*

[48] The College of Agriculture, Southern University and A&M College, (April 3, 1970) *A Report to the President*, Southern University Archives. (See also Charles Vincent, University and A&M College: Its Agricultural Development).

[49] *Tulsa World*, Saturday, January 6, 1990.

[50] Langston University, 1987 President's Annual Report, p. 24.

[51] *Tulsa World*, Saturday, January 6, 1990.

[52] *Ibid.*

[53] Data taken from S. J. Parker, "A Brief Historical Development of the University of Arkansas at Pine Bluff with Emphasis on Land-Grant Status and Cooperative Research Program," (Pine Bluff: UAPB).

[54] *UAPB Discovery*, University of Arkansas at Pine Bluff Research Center, March 1989.

[55] *Ibid.*

[56] Centennial Accomplishments Report, *A People and a Spirit Serving the Nations of the World*. Alabama A&M University: 1890 Land-Grant Centennial Publishers, 1990, pp. 39-50, and B. D. Mayberry, Director, Carver Research Foundation, "A Brief History of Our Institutions," June 7, 1989.

[57] *Brief Historical Development of the University of Maryland—Eastern Shore* (Unpublished manuscript) anon. 1977, p. 9.

[58] Centennial Accomplishments Report, *op. cit.*

[59] *1890 Research and Extension News*, Spring 1987, Vol. 2, No. 2, p. 2.

[60] Richard Coppings, "Let's Eat . . . Rabbit Meat," *Farm and Home Bulletin*. (Tennessee State University, November 1982), p. 4.

[61] *Ibid.*

[62] William Hayslett, "The Sweet Potato: The Versatile Vegetable Crop," Farm and Home Bulletin. Tennessee State University, November 1981, p. 13.

[63] Tennessee State University, CARP Research Report, 1967-1990, Unpublished manuscript.

[64] Centennial Accomplishments Report, *op. cit.*, pp.219-230.

[65] Jim Hightower, *Hard Tomatoes, Hard Times: The Failure of the Land Grant College Complex*. (Agribusiness Accountability Project: Washington, D.C.) 1972, p. 20.

[66] *Hatch Act of 1887, Section 2.*

[67] John W. Davis, *Land-Grant Colleges for Negroes*. (West Virginia State College Bulletin, Ser. 21, No. 5, 1934) p. 26.

[68] R. Grant Seals, *Analysis of Land-Grant Institutions in Louisiana: Louisiana State University and Southern University*. (Unpublished Manuscript) August 1981, pp. 34-35.

[69] *Ibid.*

[70] *Progress and Productivity Through Research and Service*, *op. cit.*, p. 20.

CHAPTER SEVEN FOOTNOTES

[1] Wayne D. Rasmussen, *Taking the University to the People* (Ames, Iowa: Iowa State University Press, 1989) pp. 34–35.

[2] B. D. Mayberry, *The Role of Tuskegee University in the Origin, Growth, and Development of the Negro Cooperative Extension System, 1881–1990* (Tuskegee: Tuskegee University, 1989) p. 15.

[3] Joel Schor, *Agriculture in the Black Land-Grant System to 1930* (Tallahassee: FAMU Foundation, 1982) p. 33.

[4] *Ibid.*

[5] Earl Crosby, "The Struggle for Existence: The Institutionalization of the Black County Agent System," *Agricultural History*, Vol. 60, No. 2, Spring 1986, pp. 123–136.

[6] Earl W. Crosby, *Building the Country Home: The Black County Agent System, 1906–1940.*(Athens: Miami University, 1977) Unpublished Dissertation, p. 39.

[7] Earl W. Crosby, "The Roots of Black Agricultural Extension," *The Historian.*

[8] *Ibid.*

[9] *Ibid*, p. 229. See also August Meier, *Negro Thought in America, 1880–1915: Racial Ideologies in the Age of Booker T. Washington* (Ann Arbor, 1963) pp. 122, 210, 295.

[10] Barbara R. Cotton, *The Lamplighters* (Tallahassee, Florida: USDA and Florida A&M University, 1982) pp. 14–15.

[11] *Ibid.*

[12] Rasmussen, *op. cit.*, p. 48.

[13] *Ibid.*

[14] *Ibid*, p. 49.

[15] *Ibid.*

[16] Congressional Record, 63rd Congress, Second Session, February 5, 1914, pp. 2928–2929.

[17] Crosby, *Building the Country Home, op. cit.*, p. 56.

[18] See Negroes in the United States: 1920–1932 (Washington D.C: United States Bureau of Census, Department of Commerce, 1935) p. 52.

[19] Chapman, *op. cit.*

[20] *Ibid.*

[21] *Ibid.*

[22] Earl W. Crosby, "Limited Success Against Long Odds: The Black County Agent." *Agricultural History*, Vol. 57, No. 3 (July 1983) pp. 280–281.

[23] *Ibid*, p. 283.

[24] *Centennial Accomplishments Report*, A People and Spirit Serving the Nations of the World (Alabama A&M University, 1890 Land-Grant University Centennial Publishers, 1990) pp. 121–132.

[25] Charles Vincent, "Southern University and A&M College: Its Agricultural Development" (Unpublished manuscript) March 13, 1989, p. 23.

[26] *Ibid.*

[27] Cotton, *op. cit.*, p. 18.

[28] *Ibid*, p. 29.

[29] *Ibid*, p. 36.

[30] H. M. Bond, "Ham and Eggs: A History of the Fort Valley Ham and Egg Show," Athens: University of Georgia. Georgia Agricultural Extension Service: Bulletin 513, June 1944, passim. Troup, C. V. "The Story of Otis S. O'Neal, Father of the Fort Valley Ham and Egg Show," *Negro Educational Review*, IV (April 1953) pp. 64–67.

[31] *Ibid*, p. 7.

[32] Donnie D. Bellamy, "Henry A. Hunt and Black Agricultural Leadership in the New South," *Journal of Negro History*, LX (October 1975), pp. 464–479. See: The Hunt Papers, Fort Valley State College Archives for articles, has short tracts and photos on O'Neal's contributions.

[33] *Ibid*, p. 15.

[34] Earl Crosby, "Limited Success Against Long Odds: The Black County Agent," *op. cit.*, pp. 277–288.

[35] Joel Schor, Ocleris Simpson, and Benjamin D. Mayberry (Eds.) "A Century of Agriculture in the 1890 Land-Grant Colleges and Universities, 1890–1990: A Stampede for Equality". (Unpublished manuscript, 1989).

[36] Interview with John Demons, Fort Valley State College, January 10, 1990.

[37] B. D. Mayberry, *op. cit.* pp. 169–170.

[38] *Ibid*, p. 170.

[39] Adapted from Mayberry, *op. cit.*, p. 168.

[40] Extension Review. "On the Road—With Technology." U. S. Department of Agriculture, (Winter 1989) pp. 14–15.

[41] Cooperative Extension Program: The People Connected. Kentucky State University: Frankfort, Kentucky.

[42] Material supplied by Bill Helvey, Communications Specialist, University Extension, University of Missouri/Lincoln University.

[43] Sylvia Hicks, "Low Income Farmers Receiving Benefits from Virginia State," VSU, Cooperative Extension Service, p. 11.

[44] *Ibid.*

[45] Lorenza W. Lyons, "Investing in Virginia's Future: Cooperative Extension Services", Virginia State University, 1989, p. 4.

[46] *Ibid*, p. 1.

[47] Ocleris Simpson, "Knowledge for Reaching Out and Helping Others." Research and Extension, 1987 President's Annual Report. Langston University, p. 25.

[48] Cooperative Extension Service, Years of Progress: Extension Progress, 1971–1981, University of Arkansas, Division of Agriculture (UAPB), p. 10.

[49] S. J. Parker, "A Brief Historical Development of the University of Arkansas at Pine Bluff Emphasis on Land-Grant Status and Cooperative State Research Programs." (Unpublished Manuscript).

[50] Research Report, Office of Dean Director, Mayo Price, UAPB. (Unpublished Manuscript).

[51] *Ibid.*

[52] Announcement of the First Annual Tennessee A & I University Farm and Home Institute, August 11–12, 1958.

[53] Leedell W. Neyland, *Florida A&M University: A Centennial History, 1887-1987* (Tallahassee: FAMU Foundation, Inc., 1987) pp. 388-389.

[54] Claude H. McGowan, "Florida A&M University Provides State Leadership for Meat Goat Production Through Its Research and Extension Programs," The Continental, FAMU Research and Extension Newsletter, Vol. 2, No. 1 (May 1987), pp. 1-3.

[55] *Ibid*, p. 2.

[56] Annual Report, 1890 Cooperative Extension Program. Florida A & M University, College of Engineering Science, Technology, and Agriculture, 1988, p.2.

[57] Harriet R. Williams, "A Brief History of Delaware State College" (Unpublished manuscript), 1989, pp. 29-31.

[58] *Ibid.*

[59] Supplement to the Mississippi Cooperative Extension Service, 1972 Fiscal Year Plan of Work for Work to be Performed by the Alcorn A&M College Branch of MCEA, Unpublished manuscript.

[60] Materials provided by Dr. Leodrey Williams, Director of Cooperative Extension Program, Southern University, 1990.

[61] School of Agricultural Sciences, Annual Report, 1984, UMES, p. 14.

[62] *Ibid.*

[63] John F. Potts, Sr. *A History of South Carolina State College*. (South Carolina State College, 1978) p. 160.

[64] *Research and Extension News*, Fall 1988, Vol. 2, No. 5, South Carolina State College, p. 2.

[65] Centennial Accomplishments Report, *op. cit.*, pp. 121-132.

[66] *Ibid.*

[67] Mayberry, B. D. *The Role of Tuskegee University in the Origin, Growth, and Development of the Negro Cooperative Extension System, 1881-1990*. (Tuskegee University: Tuskegee Institute) 1989.

[68] *Retrospect 83*, NCA&TSU, Report of Agricultural Extension and Agricultural Research, p. 3. See also Retrospect 85, p. 5.

[69] Gloria J. Mosby, Communications Specialist, "History of the Cooperative Extension Program at Prairie View A&M University" (Unpublished manuscript) passim. Annual Report, Cooperative Extension Program, PVAMU, 1988.

[70] *Ibid.*

[71] *Serving People in Need: Cooperative Extension at 1890 Universities*, USDA, Extension Service, Program Aid No. 1418, p. 1.

CHAPTER EIGHT FOOTNOTES

[1] Wright, R. R. (1913). The negro in unskilled labor. In E. R. Johnson, *The Negro's Progress in Fifty Years*. (pp. 19–127). New York: Negro Universities Press.

[2] Vincent, C. (1990). *Southern University and A&M college: Its agricultural development*. Louisiana: Southern University and A&M College.

[3] Fields, E. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Baton Rouge, Louisiana: Southern University and A&M College, Home Economics Unit.

[4] Furness, M. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Normal, Alabama, Alabama A&M University, Division of Home Economics.

[5] Pace, R. D. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Tuskegee, Alabama: Tuskegee University, Department of Home Economics.

[6] Noel, E. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Prairie View, Texas: Prairie View A&M University, Department of Home Economics.

[7] Walston, H. (1990). *Historical sketch: Kentucky State University* (1990). Frankfort, Kentucky: Kentucky State University, Department of Home Economics.

[8] Conteh, D. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Fort Valley, Georgia: Fort Valley State, Department of Home Economics.

[9] Neal, E. G. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Pine Bluff, Arkansas: University of Arkansas, Department of Home Economics.

[10] McCray, M. W. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Petersburg, Virginia: Virginia State University, Department of Human Ecology.

[11] Kellam, R. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Langston, Oklahoma: Langston University, Department of Home Economics.

[12] *Langston University Catalog (1910)*. Langston, Oklahoma:LangstonUniversity.

[13] Adams, E. W. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Dover, Delaware: Delaware State College, Department of Home Economics.

[14] Caples, V. (1990). *A people and a spirit serving the nations of the world* (1890 Centennial Accomplishments Report). Normal, Alabama: Alabama A&M University, Division of Home Economics.

[15] Dunham, M. G. (1971). The administration of Thomas J.Calloway and Edward H. Triplett. *Centennial History of Alcorn A&M College* (p. 39). Hattiesburg, Mississippi: University and College Press of Mississippi.

[16] *Catalogue of the officers and students of Alcorn Agricultural and Mechanical College (1906–1907)*. Lorman, Mississippi: Alcorn State University.

[17] *Catalogue of the officers and students of Alcorn Agricultural and Mechanical College (1910–1911)*. Lorman, Mississippi: Alcorn State University.

[18] *Catalogue of the officers and students of Alcorn Agricultural and Mechanical College (1911–1912).* Lorman, Mississippi: Alcorn State University.

[19] *Historical profile of home economics programs at 1890 colleges/universities.* (1990, Rev. 12/89). Nashville, Tennessee: Tennessee State University, Department of Home Economics.

[20] Funchess, W. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Orangeburg, South Carolina: South Carolina State College, Department of Home Economics.

[21] Kumelachew, M. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Princess Anne, Missouri: University of Maryland Eastern Shore, Department of Human Ecology.

[22] Mazyck, H. (1990). Personal Communication. Greensboro,North Carolina: North Carolina A&T State University, Home Economics Department.

[23] Walston, H. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Frankfort, Kentucky: Kentucky State University, Department of Home Economics.

[24] *Kentucky State University Catalog (1988–1990).* Frankfort,Kentucky: Kentucky State University.

[25] Huam, J., Smith, M., Glover, E. (1990). *Historical profile of home economics programs at 1890 colleges/universities* (Rev. 12/89). Lorman, Mississippi: Alcorn State University, Department of Home Economics.

[26] *Alcorn State University General Catalogue (1988–1990).*Lorman, Mississippi: Alcorn State University.

[27] *South Carolina State Catalogue (1988–1989).* Orangeburg, South Carolina: South Carolina State College.

[28] Miller, J. R. (1986). Human ecology mandated name change at Virginia State University, Petersburg. J. Powell (Ed.) *Proceedings of the Joint Meeting of Association of Administrators of Home Economics National Council of Administrators of Home Economics* (pp. 30–31). Memphis, Tennessee.

[29] Couvillon, G. A., Foley, C. W., Glover, E., Williamson, H. & Schmidt, B. L. (1990). *Review report of research and related programs in agriculture and home economics at the Tuskegee University.* Washington, DC: U.S. Department of Agriculture Cooperative State Research Service.

[30] *Tennessee State University Catalog (1987–1989).* Nashville, Tennessee: Tennessee State University.

[31] *Policies and procedural guide* (1990). Fort Valley, Georgia: Fort Valley State, Department of Home Economics.

[32] *Historical profile of home economics programs at 1890 colleges/universities* (1990, Rev. 12/89). Greensboro, North Carolina: North Carolina A&T State University, Home Economics Department.

[33] *University of Maryland—Eastern Shore Catalog (1989–1992).*Princess Anne, Maryland: University of Maryland Eastern Shore.

[34] Mayberry, B. D. (1976). *Development of research at historically black land-grant institutions.* Association of Research Directors, Land Grant 1890 Colleges and Universities.

[35] Driskell, J. A., & Myers, J. R. (1989). Human nutritionresearch conducted at state agricultural experiment stations and 1890/Tuskegee Agricultural research programs. *Home Economics Research Journal*, 3(17), 270-278.

[36] Glover, E. E. (1987). Formula-funded human nutrition research in 1890 universities—an historical perspective. In Levander, O. A., *AIN Symposium Proceedings* (pp. 9-13). Maryland: American Institute of Nutrition Press.

[37] Pace, Ralphenia, P. (1990). Personal communication. Tuskegee,Alabama: Tuskegee University, Department of Home Economics.

[38] McGee, B. B. (1990). *Summary of human nutrition and applied food research.* Baton Rouge, Louisiana: Southern University, Department of Human Nutrition and Food.

[39] McCray, J. (1990). *1890 Extension programs.* Personal communication. Pine Bluff, Arkansas: University of Arkansas, Cooperative Extension Service.

[40] Shelton, G. (1988). Barriers and incentives to affordable housing (Project No: NC. X-070-5-85-170-1). Washington, DC: CRIS USDA.

[41] McCray, J. W. (1988). Barriers and incentives to affordable housing (Project No: ARK01192). Washington, DC: CRIS USDA.

[42] Fergusa, E. (1990). *Southern Regional Textile Research.* Personal Communication. Pine Bluff, Arkansas: University of Arkansas, Cooperative Extension Service.

[43] *Serving people in need: Cooperative extension at the 1890 land-grant universities.* Washington DC: United States Department of Agriculture.

[44] Feaster, T. J., Hobbs, A., McCray, J., and Barkston, J.(1990). *Home economics extension programs at the 1890's.* Greensboro, North Carolina: North Carolina A&T State University, Agricultural Extension Program.

[45]Staff (1988). *Lincoln University* (Extension and Research Annual Report 1988). Jefferson City, Missouri: Lincoln University, Cooperative Extension Program.

[46] Staff. (1989). *Lincoln University* '89 (Extension and Research Annual Report 1989). Jefferson City, Missouri: Lincoln University, Cooperative Extension Program.

[47] Benson, H. R. (1989). *Comprehensive extension program of work 1862 and 1890 institutions.* Jefferson City, Missouri: Lincoln University, Cooperative Extension Program.

[48] Favero, P. and Heasley, D. K. (1989). *Cooperative extension and new alliances for rural economic development: Five case studies* (Publication No. 58). Normal: Alabama A&M University, Cooperative Extension Program.

[49] Henderson, C. (1990). *Current program activities and priorities in home economics.* (Accomplishment reports). Normal: Alabama A&M University, Cooperative Extension Program.

[50] Henderson, C. (1990). *Narrative report of accomplishments—FY 1980.* Alabama: Alabama A&M University, Cooperative Extension Program.

[51] Allen, A. L. (1980). *Annual goals—FY 89.* Little Rock:University of Arkansas, Cooperative Extension Service.

[52] Allen, A. L. (1990). *Youth at Risk*(Accomplishment Report). Little Rock: University of Arkansas, Cooperative Extension Service.

[53] Allen, A. L. (1990). *Arkansas rural revitalization—home-based business in Arkansas* (Accomplishment Report). Little Rock: University of Arkansas, Cooperative Extension Service.

[54] Allen, A. L. (1990). *Dilemmas and choices affecting Arkansas children and you (Amended)* (Accomplishment Report). Little Rock: University of Arkansas, Cooperative Extension Service.

[55] Allen, A. L. (1990). *Parenting—Arkansas (Amended)* (Accomplishment Report). Little Rock: University of Arkansas, Cooperative Extension Service.

[56] Allen, A. L. (1990). *Home maintenance and improvement in Arkansas.* Little Rock: University of Arkansas, Cooperative Extension Service.

[57] Staff (1988). *Extension annual report 1988.* Prairie View, Texas: Prairie View A&M University, Cooperative Extension Program.

[58] *Investing in Virginia's future—A program report (1990).* Petersburg: Virginia State University, Cooperative Extension Service.

[59] Staff. (1986). *1986—a year in review.* Petersburg:Virginia State University, Cooperative Extension Service.

[60] Staff. (1989, Fall). Funding received for employment planning program. *VSU Connection.* Petersburg: Virginia State University, Cooperative Extension Service.

[61] Staff. (1979). Home Economics. *Retrospect 1979*, Greensboro: North Carolina A&T State University, Agricultural Extension Programs.

[62] Staff. (1980). Home Economics. *Retrospect 1980*, Greensboro: North Carolina A&T State University, Agricultural Extension Programs.

[63] Staff. (1984, June). A&T extension receives march of dimes grant. *Dimensions.* Greensboro: North Carolina A&T State University, Agricultural Extension Programs.

[64] Staff. (1986, April). Eating nutritiously makes healthy, happy babies. *Dimensions!. Greensboro: North Carolina A&T State University, Agricultural Extension Programs.*

[65] *Staff. (1988). Home Economics. Retrospect 1988.* Greensboro, North Carolina: North Carolina A&T State University, Agricultural Extension Program.

[66] Johnson, M. E. (1983). *Home based skill development in home improvement—South Carolina (1890)* (FY 83 Accomplishment Report—NARS). Orangeburg: South Carolina State College, Cooperative Extension Service.

[67] Johnson, M. E. (1983). *Diet and health—South Carolina(1890)* (FY 83 Accomplishment Report—NARS). Orangeburg: South Carolina State College, Cooperative Extension Service.

[68] Johnson, M. E. (1983). *Clothing construction and recycling—South Carolina (1890)* (FY 83 Accomplishment Report—NARS). Orangeburg: South Carolina State College, Cooperative Extension Service.

[69] Johnson, M. E. (1983). *Home safety in rural areas—South Carolina (1890)* (FY 83 Accomplishment Report—NARS). Orangeburg: South Carolina State College, Cooperative Extension Service.

[70] Jenkins, G. M. (1990). *Seafood consumer education and utilization for the family's total diet and health.* College Park: University of Maryland—Eastern Shore.

[71] *Annual report for FY 1979.* Lorman, Mississippi: Alcorn State University, Alcorn Cooperative Extension Program.

[72] *Annual report for FY 1980.* Lorman, Mississippi: Alcorn State University, Alcorn Cooperative Extension Program.

[73] King, R. V. (1990). *Information about the cooperative extension program.* Langston, Oklahoma: Langston University, Cooperative Extension Program.

[74] Cyrus, E. J. (1990). *Home economics, civil rights/equal opportunity, Louisiana* 1890 (FY 88-91 Program Accomplishment Report). Baton Rouge, Louisiana: Southern University and A&M College, Cooperative Extension Program.

[75] Cyrus, E. J. (1990). *Nutrition, Louisiana 1890* (FY 88-91 Major Accomplishment Report). Baton Rouge, Louisiana: Southern University and A&M College, Cooperative Extension Program.

[76] Cyrus, E. J. (1990). *Financial planning and management, Louisiana, 1890* (FY 88-91 Major Program Accomplishment Report). Baton Rouge, Louisiana: Southern University and A&M College, Cooperative Extension Program.

[77] Cyrus, E. J. (1990). *Food preservation, Louisiana 1890* (FY 88-91 Major Program Accomplishment report). Baton Rouge, Louisiana: Southern University and A&M College, Cooperative Extension Program.

[78] Pruett, M. (1990). *Home economics extension programs.* Dover, Delaware: Delaware State College, Department of Agriculture and Natural Resources.

[79] Johnsrud, M. D., and Brook, H. M. (1990) Forward *In Serving people in need: cooperative extension at the 1890 land-grant universities.* Washington, DC: United States Department of Agriculture.

[80] Adams, E. W. (1990, March). Personal communication. Dover Delaware: Delaware State College.

[81] Mazyck, H. (1990, March). Personal communication. Greensboro, North Carolina: North Carolina A&T State University, Department of Home Economics.

[82] Kellam, R. (1990, March) Personal communication. Langston, Oklahoma: Langston University, Department of Home Economics.

[83] Vaughn, G. G. (1990, February). *Minority leadership development.* Paper presented at the annual meeting of the National Council of Administrators of Home Economics, Newport Beach, California.

[84] Byrd, F. M. (1990, March). Personal communication. Prairie View, Texas: Prairie View A&M University.

[85] Thomas, Geneive J. W., "Home Economics at Florida A&M University" (Unpublished Manuscript)

CHAPTER NINE FOOTNOTES

[1] John A. Hardin, *Onward and Upward: A Centennial History of Kentucky State University, 1886-1986.* (Frankfort: Kentucky State University, 1987) p. 50.

[2] *Ibid.* p. 54.

[3] The Washington Post, March 3, 1977.

[4] *Ibid.*

[5] Albert H. Berriau and Leonard L. Haynes, "A Study of the History and Future Development of the University of Maryland-Eastern Shore." (Mimeographed Copy) Washington: Institute for Service to Education. July 25, 1977, pp. 1-27.

[6] *Ibid.*

[7] *Ibid.*

[8] The Peach County Interprise, July 20, 1972.

[9] The Atlanta Journal, July 15, 1972.

Jack R. Hunnicutt, et al vs. W. Lee Burge, et al. Individually and as members of the Board of Regents of the University System of Georgia. U. S. District Court, Middle District of Georgia, Macon Division No. 2754, March 22, 1973, pp. 1-2.

Consent Decree, U. S. District Court of Middle Georgia, (Macon Division) No. 86-231 MAC, July 5, 1988.

[12] The Virginia Statesman, Friday, January 30, 1970.

[13] *Ibid.*

[14] *Ibid.*

[15] *Ibid.*

[16] M. A. Fields and M. T. Carter, "History of Agricultural Curriculum and Randolph Farm." Unpublished manuscript, p. 3 .

[17] Letter from Professor Irving C. Peoples to Dr. Wilbert Greenfield, dated August 21, 1984, p. 3.

[18] South Carolina State College Self-Study, Part II, Division of Agriculture, South Carolina State College, 1970, p. 5.

[19] *Ibid.* p. 7.

[20] *Ibid.*

[21] *Ibid.*

[22] Leedell W. Neyland. Florida A&M University: A Centennial History, 1887-1987. (Tallahassee: FAMU Foundation, Inc., 1987) p. 321.

[23] Charles C. Kidd, A Proposal to Establish the Cooperative Institute for International Policies Research and Education, FAMU, Tallahassee, Florida, March 4, 1988. (Members: Alabama A&M University, Alcorn State University, University of Arkansas, Pine Bluff, Bethune-Cookman College, Florida A&M University, Fort Valley State College, North Carolina A&T State University, Talladega College, Southern University, University of Maryland-Eastern Shore, Atlanta University, and Prairie View A&M University.)

[24] As quoted in Centennial Accomplishments Report, A People and a Spirit Serving the Nations of the World. (Alabama A&M University: 1890 Land-Grant University Centennial, 1990).

[25] U. S. Department of Education, National Center for Education Statistics, Washington, D.C. June 1989, pp. 243, 246, 249.

[26] See William P. Hytche, "A National Resource— A National Challenge: The 1890 Land-Grant Colleges and Universities." (USDA, CSRS, Justin Smith Morrill Lectures, 1989) pp. 12-13.

[27] Centennial Accomplishments Report, p.

[28] *Ibid.*

[29] The Associated Press, May 8, 1989.

[30] Christiana H. Gladwin and Robert Zabawa, "Structural Strategies of Small, Part-time, Black Florida Farmers: A Response to Structural Change," Agriculture and Human Values, Vol. II, No. 3 (Summer 1985) p. 51.

APPENDIX I
SECOND MORRILL ACT
August 30, 1890

(Providing for the Further Endowment and Support of Colleges of Agriculture and Mechanic Arts)

> (An Act To apply a portion of the proceeds of the public lands to the more complete endowment and support of the colleges for the benefit of agriculture and the mechanic arts established under the provisions of an act of Congress approved July second, eighteen hundred and sixty-two)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there shall be, and hereby is, annually appropriated, out of any money in the Treasury not otherwise provided, to each State and Territory for the more complete endowment and maintenance of colleges for the benefit of agriculture and the mechanic arts now established, or which may be hereafter established, in accordance with an act of Congress approved July second, eighteen Hundred and sixty-two, the sum of fifteen thousand dollars for the year ending June thirtieth, eighteen hundred and ninety, and an annual increase of the amount of such appropriation thereafter for ten years by an additional sum of one thousand dollars over the preceding year, and the annual amount to be paid thereafter to each State and Territory shall be twenty-five thousand dollars to be applied only to instruction in agriculture, the mechanic arts, the English language and the various branches of mathematical, physical, natural, and economic science, with special reference to their applications in the industries of life, and to facilities for such instruction: Provided, That no money shall be paid out under this act to any State or Territory for the support and maintenance of a college where a distinction of race or color is made in the admission of students, but the establishment and maintenance of such colleges separately for white and colored students shall be held to be a compliance with the provisions of this act if the funds received in such State or Territory be equitably divided as hereinafter set forth: Provided, That in any State in which there has been one college established in pursuance of the act of July second, eighteen hundred and sixty-two, and also in which an educational institution of like character

333

has been established, or may be hereafter established, and is now aided by such a state from its own revenue, for the education of colored students in agriculture and the mechanic arts, however named or styled, or whether or not it has received money heretofore under the act to which this act is an amendment, the legislature of such a State may propose and report to the Secretary of the Interior a just and equitable division of the fund to be received under this act between one college for white students and one institution for colored students established as aforesaid, which shall be divided into two parts and paid accordingly, and thereupon such institution for colored students shall be entitled to the benefits of this act and subject to its provisions, as much as it would have been if it had been included under the act of eighteen hundred and sixty-two, and the fulfillment of the foregoing provisions shall be taken as a compliance with the provision in reference to separate colleges for white and colored students.

SEC. 2. That the sums hereby appropriated to the States and Territories for the further endowment and support of colleges shall be annually paid on or before the thirty-first of July of each year, by the Secretary of the Treasury, upon the warrant of the Secretary of the Interior, out of the Treasury of the United States, to the State or Territorial treasurer, or to such officer as shall be designated by the laws of such State or Territory to receive the same, who shall, upon the order of the trustees of the college, or the institution for the colored students, immediately pay over said sums to the treasurers of the respective colleges or other institutions entitled to receive the same, and such treasurers shall be required to report to the Secretary of Agriculture and to the Secretary of the Interior, on or before the first day of September of each year, detailed statement of the amount so received and of its disbursement. The grants of moneys authorized by this act are made subject to the legislative assent of the several States and Territories to the purpose of said grants: Provided, That payments of such installments of the apportion herein made as shall become due to any State before the adjournment of the regular session of legislature meeting next after the passage of this act shall be made upon the assent of the governor thereof, duly certified to the Secretary of the Treasury.

SEC. 3. That if any portion of the moneys received by the designated officer of the State or Territory for the further and more complete endowment, support, and maintenance of colleges, or of institutions for colored students, as provided in this act, shall, by any action or contingency, be diminished or lost, or be misapplied, it shall be replaced by the State or Territory to which it belongs, and until so replaced no subsequent appropriation shall be apportioned or paid to such State or Territory; and no portion of said moneys shall be applied, directly or indirectly, under any pretense whatever, to the purchase, erection, preservation, or repair of any building or buildings. An annual report by the president of each of said colleges shall be made to the Secretary of agriculture, as well as to the Secretary of the Interior, regarding the condition and progress of each college, including statistical information in relation to its receipts and expenditures, its library, the number of its students and professors, and also as to any improvements and experiments made under the direction of any experiment stations attached to said colleges, with their cost and results, and such other industrial and economical statistics as may be regarded as useful, one copy of which shall be transmitted by mail free to all other colleges further endowed under this act.

SEC. 4. That on or before the first day of July in each year, after the passage of this act, the Secretary of the Interior shall ascertain and certify to the Secretary of the Treasury as to each State and Territory whether it is entitled to receive its share of the annual appropriation for colleges, or of institutions for colored students, under this act, and the amount which thereupon each is entitled, respectively, to receive. If the Secretary of the Interior shall withhold a certificate from any State or Territory of its appropriation the facts and reasons therefor shall be reported to the President, and the amount involved shall be kept separate in the Treasury until the close of the next Congress, in order that the State or Territory may, if it should so desire, appeal to Congress from the determination of the Secretary of the Interior. If the next Congress shall not direct such sum to be paid it shall be covered into the Treasury. And the Secretary of the Interior is hereby charged with the proper administration of this law.

SEC. 5. That the Secretary of the Interior shall annually report to Congress the disbursements which have been made in all the States and Territories, and also whether the appropriation of any State or Territory has been withheld, and if so, the reasons therefor.

SEC. 6. Congress may at any time amend, suspend, or repeal any or all of the provisions of this act.

Approved, August 30, 1890

APPENDIX II

TABLE I.

Home Economics-Related Classes at 1890 Colleges/Universities

College/University	*Year*
Alcorn State University	1903
Delaware State College	1902
Florida A&M University	1896
Fort Valley State College	
Kentucky State College	Between 1890 and 1897
Langston University	1900
Lincoln University	Unknown
North Carolina A&T and State University	Unknown
Prairie View A&M University	1888
South Carolina State College	1917
Southern University and A&M College	
Tennessee State University	1912
Tuskegee University	1883
University of Arkansas at Pine Bluff	1897
University of Maryland Eastern Shore	1925
Virginia State University	1899

Data were obtained from a Historical Profile Survey of Academic Home Economics Units at 1890 colleges/universities, conducted in December 1988 and completed by Heads of Home Economics Units or their Representative(s).

APPENDIX III

PROFILES OF 1890 LAND-GRANT INSTITUTIONS, 1988–89

Alabama A&M University

Legal Name: Alabama Agricultural and Mechanical University
Address: Normal, Alabama 35762
Comonly Used Acronyms: AAMU
Mascot Name: Bulldogs
Founding Date: May 1, 1875
Size of First Enrolled Class: 61
Current Enrollment: 4,501
Size of Initial Faculty: 2
Size of Current Faculty: 270
Number of Initial Majors Offered: 1
Number of Current Majors Offered: 111
Highest Degree Offered: Ph.D.
Size of Initial Appropriation for Operations: $1,000
Current Appropriations: $47,725,213
Size of First Research Appropriation: $10,870
Source of Funds for First Research Activity: National Science Foundation
Size of First CSRS Appropriation: $18,396
Size of Current CSRS Appropriation: $1,414,690
Size of First Extension Appropriation: $228,000
Size of Current Extension Appropriation: $1,133,166
Total Current Endowment: $2,500,000
Size of Initial Physical Plant:
  Number of Buildings: 1
  Number of Acres: 0.5
Size of Current Physical Plant:
  Number of Buildings: 48
  Number of Acres: 2,090

Alcorn State University

Legal Name: Alcorn State University
Address: Rural Station, Lorman, MS 39096
Comonly Used Acronyms: ASU
Mascot Name: The Braves
Founding Date: May 13, 1871
Size of First Enrolled Class: 179
Current Enrollment: 2,850
Size of Initial Faculty: 8
Size of Current Faculty: 149
Number of Initial Majors Offered: 2
Number of Current Majors Offered: 52
Highest Degree Offered: Master's
Size of Initial Appropriation for Operations: $50,000
Current Appropriations: $9,732,678
Size of First Research Appropriation: $18,751
Source of Funds for First Research Activity: CSRS/USDA
Size of First CSRS Appropriation: $18,751
Size of Current CSRS Appropriation: $1,541,462
Size of First Extension Appropriation: $133,420
Size of Current Extension Appropriation: $1,131,140
Total Current Endowment: $1,995,565
Size of Initial Physical Plant:
  Number of Buildings: 4
  Number of Acres: 255
Size of Current Physical Plant:
  Number of Buildings: 104
  Number of Acres: 1,739

Delaware State College

Legal Name: Delaware State College
Address: 1200 North DuPont Highway,
  Dover, Delaware 19901
Comonly Used Acronyms: DCS; DelState
Mascot Name: Hornet
Founding Date: May 15, 1891
Size of First Enrolled Class: 12
Current Enrollment: 2,603
Size of Initial Faculty: 3
Size of Current Faculty: 144
Number of Initial Majors Offered: 5
Number of Current Majors Offered:
  85 (Bachelor's); 11 (Master's)
Highest Degree Offered: Master's Degree
Size of Initial Appropriation for Operations: $4,000
Current Appropriations: $27,750,292
Size of First Research Appropriation: $12,400
Source of Funds for First Research Activity: CSRS
Size of First CSRS Appropriation: 12,400
Size of Current CSRS Appropriation: $471,000
Size of First Extension Appropriation: $83,810
Size of Current Extension Appropriation: $313,000

Total Current Endowment:
$1,192,657 (Book value)
$1,306,136 (Market value)
Size of Initial Physical Plant:
Number of Buildings: 4
Number of Acres: 95.25
Size of Current Physical Plant:
Number of Buildings: 24
Number of Acres: 400

Florida A&M University

Legal Name: Florida Agricultural & Mechanical University
Address: South Adams Street
Tallahassee, Florida 32307
Comonly Used Acronyms: FAMU
Mascot Name: Rattler
Founding Date: October 3, 1887
Size of First Enrolled Class: 15
Current Enrollment: 7,486
Size of Initial Faculty: 2
Size of Current Faculty: 628
Number of Initial Majors Offered: 1
Number of Current Majors Offered: 72
Highest Degree Offered: Ph.D.
Size of Initial Appropriation for Operations: $4,000
Current Appropriations: $56,639,014*
Size of First Research Appropriation: $18,000
Source of Funds for First Research Activity: Federal Government
Size of First CSRS Appropriation: $14,952
Size of Current CSRS Appropriation: $958,874
Size of First Extension Appropriation: $240,000
Size of Current Extension Appropriation: $926,246
Total Current Endowment: $15,059,887.15
Size of Initial Physical Plant:
Number of Buildings: 1
Number of Acres: 1
Size of Current Physical Plant:
Number of Buildings: 106
Number of Acres: 419
*Educational and General only

Fort Valley State College

Legal Name: The Fort Valley State College
Address: 1005 State College Drive
Fort Valley, GA 31030
Comonly Used Acronyms: FVSC
Mascot Name: Wildcats
Founding Date: Established 1890; chartered 1896
Size of First Enrolled Class: Not known
Current Enrollment: 2,097
Size of Initial Faculty: 2
Size of Current Faculty: 146
Number of Initial Majors Offered: started as a consolidated elementary and secondary school.
Number of Current Majors Offered: 50
Highest Degree Offered: Master's
Size of Initial Appropriation for Operations: Real property valued at $700 in 1895
Current Appropriations: $11,650,886 (State)
Size of First Research Appropriation: $1,000
Source of Funds for First Research Activity: The Carnegie Foundation
Size of First CSRS Appropriation: $18,836
Size of Current CSRS Appropriation: $1,555,740
Size of First Extension Appropriation:
Size of Current Extension Appropriation:
Total Current Endowment: $577,335
Size of Initial Physical Plant:
Number of Buildings: 1 building under construction in November 1895
Number of Acres: 1
Size of Current Physical Plant:
Number of Buildings: 83
Number of Acres: 1,333

Kentucky State University

Legal Name: Kentucky State University
Address: Frankfort, Kentucky
Comonly Used Acronyms: KSU
Mascot Name: Thoroughbred
Founding Date: 1886 (began operations 1886)
Size of First Enrolled Class: 55
Current Enrollment: 2,190
Size of Initial Faculty: 3
Size of Current Faculty: 144
Number of Initial Majors Offered: 1
Number of Current Majors Offered: 37
Highest Degree Offered: Master's
Size of Initial Appropriation for Operations: $3,000 (state funds)

Current Appropriations: $15,990,600 (state funds)
Size of First Research Appropriation: $167,000
Source of Funds for First Research Activity:
Size of First CSRS Appropriation: $1,102,248
Size of Current CSRS Appropriation: $1,639,725
Size of First Extension Appropriation: $261,512
Size of Current Extension Appropriation: $1,393,496
Total Current Endowment: $2,289,701
Size of Initial Physical Plant:
  Number of Buildings: 1
  Number of Acres: 5
Size of Current Physical Plant:
  Number of Buildings: 32
  Number of Acres: 485

Langston University

Legal Name: Langston University
Address: Post Office Box 907
  Langston, Oklahoma 73050
Comonly Used Acronyms: LU
Mascot Name: Lion
Founding Date: March 12, 1897
Size of First Enrolled Class: 41
Current Enrollment: 2,816
Size of Initial Faculty: 4
Size of Current Faculty: 78
Number of Initial Majors Offered: 1 (B.S.D)
Number of Current Majors Offered: 7
Highest Degree Offered: Master's
Size of Initial Appropriation for Operations: $5,000
Current Appropriations: $8,343,391
Size of First Research Appropriation: $15,956
Source of Funds for First Research Activity: CSRS
Size of First CSRS Appropriation: $15,956
Size of Current CSRS Appropriation: $1,100,122
Size of First Extension Appropriation: $169,062
Size of Current Extension Appropriation:
  State: $388,000
  Federal: $998,800
Total Current Endowment: $765,165.35
Size of Initial Physical Plant:
  Number of Buildings: 1
  Number of Acres: 40
Size of Current Physical Plant:
  Number of Buildings: 33
  Number of Acres: 160

Lincoln University

Legal Name: Lincoln University
Address: 820 Chestnut Street
  Jefferson City, MO 65101
Comonly Used Acronyms: LU
Mascot Name: Blue Tiger
Founding Date: 1866
Size of First Enrolled Class: 2
Current Enrollment: 3,063
Size of Initial Faculty: 1
Size of Current Faculty: 139
Number of Initial Majors Offered: 2 departments (preparatory and Normal)
Number of Current Majors Offered: 9
Highest Degree Offered: MAster of Arts
Size of Initial Appropriation for Operations: $5,000
Current Appropriations: $9,870,790
Size of First Research Appropriation: $18,000
Source of Funds for First Research Activity: USDA
Size of First CSRS Appropriation: $551,559
Size of Current CSRS Appropriation: $1,674,491
Size of First Extension Appropriation: $253,350
Size of Current Extension Appropriation: $1,668,648
Total Current Endowment: $30,000
Size of Initial Physical Plant:
  Number of Buildings: 1
  Number of Acres: Unknown
Size of Current Physical Plant:
  Number of Buildings: 52
  Number of Acres: 830

North Carolina A&T State University

Legal Name: North Carolina Agricultural and Technical State University
Address: 1602 E. Market Street
  Greensboro, NC 27411
Comonly Used Acronyms: A&T
Mascot Name: Aggies
Founding Date: March 9, 1891
Size of First Enrolled Class: 37
Current Enrollment: 6,500
Size of Initial Faculty: 4
Size of Current Faculty: 443
Number of Initial Majors Offered: 4
Number of Current Majors Offered: 122
Highest Degree Offered: MS/MA

Size of Initial Appropriation for Operations: $2,500
Current Appropriations: $74,13,782
Size of First Research Appropriation: $51,290
Source of Funds for First Research Activity: NIH
Size of First CSRS Appropriation: $22,500
Size of Current CSRS Appropriation: $2,184,915
Size of First Extension Appropriation: $360,000
Size of Current Extension Appropriation: $1,900,000
Total Current Endowment:
Size of Initial Physical Plant:
  Number of Buildings: 1
  Number of Acres: 14
Size of Current Physical Plant:
  Number of Buildings: 101
  Number of Acres: 737.90

Prairie View A&M University

Legal Name: Prairie View A&M University
Address: P.O. Box 188
  Prairie View, TX 77446
Comonly Used Acronyms: PVAMU or "The Hill"
Mascot Name: Panther
Founding Date: August 14, 1876
Size of First Enrolled Class: 8
Current Enrollment: 5,600
Size of Initial Faculty: 2
Size of Current Faculty: 315
Number of Initial Majors Offered: 13
Number of Current Majors Offered: 47 undergraduate, 16 graduate
Highest Degree Offered: Master's
Size of Initial Appropriation for Operations: $20,000
Current Appropriations: $21,161,076
Size of First Research Appropriation: $10,000
Source of Funds for First Research Activity: Texas Agricultural Experiment Station
Size of Current CSRS Appropriation: $2,212,420
Size of First Extension Appropriation: $327,000
Size of Current Extension Appropriation: $2,046,539
Total Current Endowment: $3,000,000+
Size of Initial Physical Plant:
  Number of Buildings: 1
  Number of Acres: 1,438
Size of Current Physical Plant:
  Number of Buildings: 93
  Number of Acres: 1,438

South Carolina State College

Legal Name: South Carolina State College
Address: 300 College Street, N.E.
  Orangeburg, South Carolina
Comonly Used Acronyms: SCSC
Mascot Name: Bulldog
Founding Date: March 3, 1986
Size of First Enrolled Class: 1,041
Current Enrollment: 4,781
Size of Initial Faculty: 13
Size of Current Faculty: 235
Number of Initial Majors Offered: 5
Number of Current Majors Offered: 54
Highest Degree Offered: Ed.D.
Size of Initial Appropriation for Operations: $5,000
Current Appropriations: $18,000,000
Size of First Research Appropriation: $500
Source of Funds for First Research Activity: Rosenwald Foundation
Size of First CSRS Appropriation: $17,143
Size of Current CSRS Appropriation: $1,194,949
Size of First Extension Appropriation: $214,40
Size of Current Extension Appropriation: $843,,346
Total Current Endowment: $573,371
Size of Initial Physical Plant:
  Number of Buildings: 8
  Number of Acres: 135
Size of Current Physical Plant:
  Number of Buildings: 70
  Number of Acres: 15 on campus, 285 at Camp Harry Daniels for a total of 436 acres

Southern University and A&M College

Legal Name: Southern University
  and A&M College
Address: Baton Rouge, Louisiana 70813
Comonly Used Acronyms: SU, SUBR, and
  SU A&M
Mascot: Jaguar **Name:** LaCumba
Founding Date: April 10, 1880
Size of First Enrolled Class: 43
Current SU A&M Enrollment: 8,823
Current System-wide Enrollment: 13,574

Size of Initial Faculty: 5
Size of Current Faculty: 453
Number of Initial Majors Offered: 3
Number of Current Majors Offered: 155
Highest Degree Offered: Doctorate
Size of Initial Appropriation for Operations: $10,000
Size of Initial Federal Appropriation for Operations: $11,667
Current System-wide Operating Budget: $89,062,289
Size of First Research Appropriation: $35,00
Source of Funds for First Research Activity: NSF
Current Research Funding Portfolio: $3,353,436
Size of First CSRS Appropriation: $16,251
Size of Current CSRS Appropriation: $1,098,367
Size of First Extension Appropriation: $185,000
Size of Current Extension Appropriation: $796,120
Total Current Endowment: $1,402,062
Size of Initial Physical Plant (New Orleans):
    Number of Buildings: 1
    Number of Acres: 1.01
Size of Current Physical Plant (SU A&M):
    Number of Buildings: 114
    Number of Acres: 884

*NOTE: Except where indicated, all data presented here pertains to the SU A&M Baton Rouge campus.

Tennessee State University

Legal Name: Tennessee State University
Address: 3500 John A. Merritt Boulevard
    Nashville, TN 37209-1561
Comonly Used Acronyms: TSU
Mascot Name: Tigers
Founding Date: 1912
Size of First Enrolled Class: 247
Current Enrollment: 7,362
Size of Initial Faculty: 15
Size of Current Faculty: 308
Number of Initial Majors Offered: 7
Number of Current Majors Offered: 90
Highest Degree Offered: Doctoral (Ph.D. & Ed.D.)
Size of Initial Appropriation for Operations:
Current Appropriations: $26,576,600
Size of First Research Appropriation:
Source of Funds for First Research Activity:
Size of First CSRS Appropriation: $17,658.50
Size of Current CSRS Appropriation: $1,659,999
Size of First Extension Appropriation: $1,284,727
Total Current Endowment: $777,260
Size of Initial Physical Plant:
    Number of Buildings: 3
    Number of Acres: 130 (35 campus, 95 farm)
Size of Current Physical Plant:
    Number of Buildings: 69 (2 campuses—Main and Downtown)
    Number of Acres: 685

Tuskegee University

Legal Name: Tuskegee University
Address: Tuskegee Institute, AL 36088
Comonly Used Acronyms: TU; Skege
Mascot Name: Tiger
Founding Date: February 12, 1881
Size of First Enrolled Class: 30
Current Enrollment: 3,435
Size of Initial Faculty: 3
Size of Current Faculty: 314
Number of Initial Majors Offered: 1
Number of Current Majors Offered: 45
Highest Degree Offered: Master of Science and Doctor of Veterinary Medicine
Size of Initial Appropriation for Operations: $2,000
Current Appropriations: $21,246,602
Size of First Research Appropriation: $1,500
Source of Funds for First Research Activity: Alabama State Legislature
Size of First CSRS Appropriation: $530,698
Size of Current CSRS Appropriation: $1,312,382
Size of First Extension Appropriation: $228,144
Size of Current Extension Appropriation: $957,792
Total Current Endowment: $35,000,000
Size of Initial Physical Plant:
    Number of Buildings: 0—Church Property
    Number of Acres: 0
Size of Current Physical Plant:
    Number of Buildings: 157
    Number of Acres: 4,217

University of Arkansas at Pine Bluff

Legal Name: University of Arkansas at Pine Bluff

Address: P.O. Box 4008
Pine Bluff, Arkansas 71601
Comonly Used Acronyms: UAPB—AM&N
Mascot Name: Golden Lions
Founding Date: 1873
Size of First Enrolled Class: 7
Current Enrollment: 3,531
Size of Initial Faculty: 1
Size of Current Faculty: 165
Number of Initial Majors Offered: 1
Number of Current Majors Offered: 4
Highest Degree Offered: B.S. and B.A.
Size of Initial Appropriation for Operations: $25,000
Current Appropriations: $11,648,935
Size of First Research Appropriation: $16,980
Source of Funds for First Research Activity: State Funds
Size of First CSRS Appropriation: $16,980
Size of Current CSRS Appropriation: $1,602,557
Size of First Extension Appropriation: $95,220
Size of Current Extension Appropriation: $854,233
Total Current Endowment: $1,532,039
Size of Initial Physical Plant:
  Number of Buildings: 1
  Number of Acres: 1/4 block
Size of Current Physical Plant:
  Number of Buildings: 57
  Number of Acres: 453

University of Maryland—Eastern Shore

Legal Name: University of Maryland—Eastern Shore
Address: Backbone Road
Princess Anne, Maryland 21853
Comonly Used Acronyms: U.M.E.S.
Mascot Name: The Hawk
Founding Date: September 13, 1886
Size of First Enrolled Class: 9
Current Enrollment: 1,828
Size of Initial Faculty: 1
Size of Current Faculty: 141
Number of Initial Majors Offered: 3
Number of Current Majors Offered: 43
Highest Degree Offered: Ph.D.
Size of Initial Appropriation for Operations:
Current Appropriations: $28,277,747
Size of First Research Appropriation: $60,000
Source of Funds for First Research Activity: U.S. Deot. of Interior, PHS/HEW
Size of First CSRS Appropriation: $14,231
Size of Current CSRS Appropriation: $820,000
Size of First Extension Appropriation: $144,992
Size of Current Extension Appropriation: $687,370
Total Current Endowment: $2.4 million
Size of Initial Physical Plant:
  Number of Buildings: 1
  Number of Acres: 16
Size of Current Physical Plant:
  Number of Buildings: 58
  Number of Acres: 538

Virginia State University

Legal Name: Virginia State University
Address: Petersburg, Virginia
Comonly Used Acronyms: VSU
Mascot Name: Trojan
Founding Date: 1882
Size of First Enrolled Class: 117
Current Enrollment: 4,073
Size of Initial Faculty: 7
Size of Current Faculty: 184
Number of Initial Majors Offered: 3
Number of Current Majors Offered: 52
Highest Degree Offered: MAster's and Certificate of Advanced Graduate Studies (CAGS)
Size of Initial Appropriation for Operations: $20,000
***Current Appropriations:** $15,702,866
Size of First Research Appropriation: $2,000
Source of Funds for First Research Activity: USDA
Size of First CSRS Appropriation: $18,500
Size of Current CSRS Appropriation: $1,432,207
Size of First Extension Appropriation: $272,000
Size of Current Extension Appropriation: $1,086,653
Total Current Endowment: $100,213
Size of Initial Physical Plant:
  Number of Buildings: 1
  Number of Acres: 33
Size of Current Physical Plant:
  Number of Buildings: 75
  Number of Acres: 652
*State appropriation from general funds

Profiles adapted from the Centennial Accomplishment Report. *A People and a Spirit Serving the Nation and the World.* (Alabama A&M University: 1890 Land-Grant University Centennial, 1990).

INDEX

Act of Congress, 12
Adams, Eva, 216; 249
Adams v. Richardson, 100; 265
Adams States Cases, 100; 256
Africa, 105; 119
Agricultural Research Service, 133
agriculture, 99-100
Aiken, John Boyken, 60
Alabama, 98; 101; 120; 208-209
  Annual Farmers Conference, 35
  Coffee County, 106
  Experiment Station, 11
  Huntsville, 32; 34
  Huntsville State Normal and Industrial School, 33-34
  Land-grant colleges, 22; 34; 45
  Legislature, 34;44
  Morrill Act funds, 33-36
  Normal, Alabama, 34
Alabama A&M University
  (also Huntsville Normal and Industrial School; Alabama A&M College), 32-36; 46; 86; 93; 95; 108; 146; 176; 192; 197-199; 220; 224; 234; 238-239; 254

  aims, 35; 112; 116; 125-126; 267-268; 269
Alabama Polytechnic Institute, 35
Alabama State University, 45
Albritton, D. J., 136
Alcorn, James L., 3
Alcorn State University; (see also Oakland College; Alcorn Agricultural and Mechanical College of the State of Mississippi), 3; 15; 16; 22; 86; 95; 103; 116; 127-128; 144; 177; 190; 194; 199-201; 228; 234; 244; 254
    Bowles Science and Agricultual Building, 8
    College Catalog, 7
    General Education Board Grant, 8
    Internal disturbances, Student strikes, 3
Allain, T. T., 39
Allen, Arthur L., 170
Allen, Benjamin F., 26
Ame, Adelbert, 3
American Association of Retired Persons, 241
American Council on Education, 82
American Society of Horticulture, 107
Amoah, E. A., 123
Anderson, E. H., 36
Anderson, L. C., 36-37
Anderson, W. T., 160
Annual Farmers Conference, 35
Apperwhite, Juanita, 221-222
Archer, Beverly B., 173; 260
Argentina, 135
Arizona, 135
Arkansas, 98
  Arkansas Agricultural, Mechanical and Normal School (also Branch Normal College), 32
  Morrill Act of 1890, 31
  Negro Education, 18
  Pine Bluff, 30-31
  State Superintendent for Public Instruction, 30
  University of Arkansas, Fayetteville, 30; 32
  University of Arkansas, Pine Bluff 30-32; 85; 118; 131; 136-137; 170-171; 192; 211-212; 225-226; 232-233; 236; 239-240; 254; 267
  Junior College curriculum, 31
Armstrong, Samuel Chapman, 8-11; 37; 44
Ash, Jefferson G., 31
Asia, 119
Association of Agricultural Colleges and Experimental Stations, 75
Association of Land-Grant Colleges and Universities, 77; 89; 90-91
Association of Research Coordinators, 115
Atlanta University, 92
Atwood, Rufus Ballard, 14; 79; 83; 85; 91;

255
Auburn University, 112
Australia, 120; 126
Australia, Melbourne, 120
Baker, B., 128
Banks, W. R., 38; 103
Banks, W. S. Sm., 86
Barker, Dean, 83
Barnes, 113
Baughns, Thomas F., 170
Bell, Gracie, 222
Bell, William H., 103
Benepal, P. S., 116; 131
Benson, Harold R., 166
Benson, O. K., 199
Berea College, 13
Berner, Lewis, 120
Berriau, Albert H., 256
Bhagsari, A. S., 123
Bhangor, M. S., 136
Biswas, P. K., 116
Black, Thomas Herbert Jr., 68
Blanchet, W. W. E., 107
Bluford, F. D., 64; 91
Bond, Horace Mann, 65
Boll Weevil Monument, 106
Borgmann, Carl W., 90
Bowles, Preston S., 7
Boyd, Henry Allen, 70
Boykin, William C., 177
Bradford, Robert, 273
Brazil, 126; 135
Bridgeforth, George R., 149–150
Brogher, Gene, 176
Brooks, E. C., 77
Brooks, Henry, 180–181
Brown v Board of Education, 73
Brown, W. S., 72
Bruce, Robert G., 98
Buchanan, Walter S., 35
Buford, Hohn E., 68
Bulgaria, 120
Burrus, John D., 5–6; 19
Burton, Jerome L., 177
Byrd, Flossie M., 202
Calloway, Thomas J., 194
Campbell, T. M., 148; 159
Canada, 120; 126
Canada, Winnipeg, 120
Caples, Virginia, 198
Caprine Research Project, 129
Carr, Benjamin, 70
Caruther, J. Thomas, 70
Carnegie Foundation, 107
Carter, Hazo, 142
Carter, Lawrence, 173; 174
Carter, Millard Tennyson, 167
Carver Foundation, 106
Carver, George Washington, 47; 105; 106; 120; 137; 148; 160
Ceasars *Commentaries*, 47
Central State College, 92
Chambers, M. M., 82
Civil Rights Act of 1964, 100; 110; 162
Civil Rights Cases of 1883, 17
Civil War, 1; 23
Claflin University, 3; 11–13; 15; 16; 28
  (see also Colored Normal, Industrial, Agricultural and Mechanical College, 12–13; and South Carolina Agricultural College and Mechanics' Institute), 11–12
Clark, Felton G., 43; 89; 90; 91; 103; 158
Clark, John B., 170
Clark, J. S., 41–43
Clarke, Edward E., 26
Clayton, W. J., 54
Clemson Agricultural College, 12; 28; 263
Coliver, Ambrose, 92
Colson, James M., 50
Committee on Allocation of Research Funds to Selected Land-Grant Colleges, 117
Committee on Civilian Components of the Armed Forces, 84; 85
Committee on Organization and Policy, 75
Compromise of 1877, 17
Conference of Negro Land-Grant Colleges, 81; 83
Conference of Presidents of Negro land-

grant Colleges, 15; 72-73; 75-93; 111
Conteh, D. B., 123
Cooper, George, 269
Cooperative Extension Service, 88; 155
Cooperative State Research Service, 110; 119
Coppings, Richard, 142
Corbin, J. C., 30-31
Cormier, Phillip, 134
Corson, John, 82
Coultas, Charles L., 121
Council of Presidents/Chancellors of 1890 Land-Grant Institutions (also Conference of Presidents of Negro Land Grant Colleges), 15; 72-73; 75-93; 111-113; 188
Council on Cooperative College Projects, 91
Councill, William Hooper, 33; 35; 46
Cox, John A., 179
Crew, Rozier W., 274
Crisis, 58
Crosby, J. O., 62
Cuppage, W. A., 54-55
Curtis, Austin W., 72
Czechoslovakia, Ceske Budejovice, 120
Daily Herald (Jacksonville), 19
Dalton, Bill K., 257
Daniels, 91
Darmouth University, 5
Davis, Evalena, 218
Davis, John W., 76; 77; 80; 83; 103; 144
Davis, Lawrence, 32
Davis, Leroy, 134
Davis, W. S., 72-73
de la Garza, E., 116
Delaware
  Bureau of Education, 61
  Dover, 60
  General Assembly, 60
  Land-grant colleges, 22-23; 60-61
  Second Morrill Act, 60-61
Delaware State College (also the State College for Colored Students), 60; 123-124; 146; 193; 215-216;
231-232
Demas, Henry, 39
Demons, John, 162
Department of the Interior, 77
Depression, 78
Development of Research at Historically Black Land-Grant Institutions, 113
Dhillon, 117-118; 119
Diggs, B. G., 128
Dimensions of Poverty in the South, 119; 133
Donald, Samuel, 116; 127; 177; 270
Downs, E. H., 82
Doyle, P. J., 139
Drake, James Fanning, 35
DuBois, W. E. B., 81; 92
DuBose, Helen J. E., 86
Dudley, James B., 62-63; 76
DuPont, P. S., 61
Duval, William D., 54
Eddy, 19; 100
Edwards, Jimmie L., 170
Elkins, V. L., 159
engineering, 100
England, 126
Europe, 119
Evans-Allen funds, 146
Evans, Sidney H., 107; 131; 133
Experimental Stations, 88; 113
Extension Committee on Organization and Policy, 113
Fahm, Esther Glover, 190; 200-201
Fair Employment Practices Commission, 82
Farm Demonstration Work Program, 148
Farm Home Agencies, 87
Farm Ownership Loans, 87
Farmers' Conference, 48; 150
Farmers Cooperative Demontration, 147
Farmers' Institute, 48; 151
Farrell, J. E., 172
Fayerweather, George, 39
Federal Board of Education, 97
Federal Board for Vocational Education, 98
Federal Extension Service, 111

Federal Funds, 116
Felsman, Robert J., 170; 171
Fenderson, C. L., 142
Ferguson, Daniel L., 51
Fields, Eva, 207–208
Fifteenth Annual Conference of the Presidents of Negro Land-Grant Colleges, 103
Fisher, Isaac, 31
Fisk University, 5; 92
Florida A&M University (also the State Normal College for Colored Students), 22; 27; 53–60; 76; 98; 100; 102; 108; 114; 116; 117; 146; 158–159; 163–164; 173–174; 217; 218–220; 254; 261; 263-264; 266–267; 268; 269; 271; 273–274
  Smith-Hughes Professor of Agriculture, 57
  Smith-Hughes Professor of Mechanical Arts, 57
  Superintendent of Farms, 54
Florida A&M University Research Bulletin, 108
Florida, 48; 53–60; 98; 119; 120; 121
  Board of Control, 57; 96
  Board of Regents, 220; 263; 264
  Duval County, 54
  Entomology Department,120–121
  Florida State University, 54; 263; 264
  Land-grant colleges, 22
  legislature, 53
  Leon County Farmers' Association, 159
  Negro Farmers' Union, 158
  Madison County Farmers' Association, 158
  Second Morrill Act, 54–60
  segregation requirements), 18
  'Summer School Act,' 96
  Superintendent of Public Instruction, 56
  Suwannee County Farmers' Cooperative Association, 158–159
  Tallahassee, 53–54
  University of Florida, 163; 264
  Wetland Ecology, 121
Floyd, McArthur, 126
Ford, Clinita, 219
Fort McIntosh, 23
Fort Valley State College
  also 'The Georgia State Industrial College for Colored Youths'), 64–66; 86; 101; 107; 114; 122; 159–162; 212–214; 223; 225; 234 ; 257–258; 267; 269
Foster, Richard B., 23
Foster, Thelma, 235
'4-H Club,' 153
France, 120; 126; 135
Frazier, E. Franklin, 92
Freedman's Hospital, 206
Freeman, Orville L., 112
Frissell, Hollis Burke, 10
Gaines v. University of Missouri, 103; 104
Galloway, Elizabeth C. May, 201–202
Gandy, John M., 50; 52; 76; 77
Gardener, James, 264
Gayles, Godfrey, 132
Georgia, 48; 98; 122; 165
  Board of Regents, 65; 66; 257
  Farmers Conferences, 65
  General Assembly, 64; 66
  Land-grant colleges, 22; 64–66
  Strayer Committee, 65
  University of Georgia, 162
  University System, 65
Georgia State College, 182
Ghebremedhin, Tesfa, 134
Gibbs, Thomas Van Rennssalaer, 54
Giles, William L, 127
Graves, John Temple, 19
Gray, William H., 102
Greenfield, Wilbert, 261
Greenhouse, Phyllis, 212
Gresham, J. A., 159
Grier, H. E., 128
Grossley, Richard S., 61
Guelph Agricultural College of Toronto, 54
Haire, Susie L., 22
Haiti, Republic of, 67
Hale, William Jasper, 70

Hall, Elizabeth C. May, 202
Hall v. DeCuir, 17
Hampton University; (also Hampton Institute; Hampton Normal and Agricultural Institute;), 3; 8-11; 15; 16; 21; 36; 44; 76; 81; 92; 98
  'Education for Life' concept, 10
  Philsophy of education, 9
Hardin, Clifford, 113
Harlan, Louis, 63
Harris, William T., 46
Harrison, Fred., 165
Harter-Dennis, Jeannine, 140
Harvard University, 35
Hastie, William H., 82
Hastings, Geraldine R., 221
Hatch Act of 1887, 37; 88; 111; 113; 114; 144; 164
Hatch Experiment Station Act, 6
Haynes, Leonard L., 256
Hayslett, William, 142
Hightower, Jim, 143
Hill, Carl, 255
Hill, T. M., 264
Hill, Walter, 209
Hillman, Kenneth, 142
Hobbs, Alma, 236
Holiday, O. R., 171
Home Economics, 99; 100; 190-252
  pre-baccalaureate instruction, 191
Hong Kong, 120
Houchins, Joseph R., 82
Houston, David F., 151
Howard, William H. A., 57; 58; 98
Howard University, 31; 92
  School of Law, 67
Howie, Marguerite R., 116; 119
Hsieh, Y. P., 121
Hudson, Sara T., 222
Humphries, Frederick S., 109
Jack R. Hunnicut, et al, vs. W. Lee Burge, et al., 257-258
Hunt, Henry A., 65
Hunt, S. K., 123
Hytche, William P., 272
India, 126
Insured Farm Ownership Mortgage Loans and Farm Housing Loans, 87
Jackson, Hezekiah, 133
Jackson, John H., 13; 25
James. R. W., 72
Jamison, Hugh, Jr., 40
Jesup Wagon, 148; 149; 165
Jiang, Kuo Shii, 124
Johnson, C., 142
Johnson, Charles S., 92
Johnson, George, 82
Johnson, Gearldean, 21
Johnson, Henry S., 67
Johnson, L. D., 123
Johnson, Overton, 259-260
Johnson, P. D., 159
Johnston, James Jugo, 50
Jones, D. C., 68
Jones, Dewitt, 134
Jones, Edward R., 123-124
Jones, Eugene Knicles, 78
Jones, Lewis Webster, 85; 116
Jones, R., 142
Jones, Thomas Jesse, 96
Jones, Wesley, 152
Jordan, T. J., 155
Kahn, A. S., 132
Kappa Omicron Phi National Home Economics Honor Society, 205
W. K. Kellogg Foundation, 185
Kellam, Ramona, 250
Kelly, James B., 12
Kennedy, Amos., 132
Kentucky, 3, 102
Kentucky State University, 3;
  (see also State Normal School for Colored Persons,) 13-15; (Kentucky Normal and Industrial Institute for Colored Persons,) 14; Kentucky State Colege for Negroes), 15; 83; 86; 87; 100; 118; 124-125; 167; 192; 196-197; 229; 234; 237; 254; 255
Kentucky, University of;
  (see also Agricultual and Mechanical College of Kentucky), 13-15; 255

Kentucky (West Kentucky Vocational School for Colored Persons), 14-15
  Enrollment, 22
  Land-grant colleges, 22; 74; 79
Kiah, Thomas H., 53; 76
Kidd, Charles, 163; 173; 264; 269
Killian, Dianne, 218
Kirkwood, James, 269
Klein, Arthur, 38; 99
Kleinholz, Conrad, 169
Knapp, Seaman A, 147
Knoxville College, 69
Land Grant College Association, 85; 109
Land Grant Colleges, 76
  agriculture, 110-146
  Conference of Presidents, 75-93
  extension services, 147-189
  federal funds, 116
  future, 253-275
  home economics, 190-252
  impact of Morril Act of 1890 (to 1940), 16-74
  inequities, 88
  Morrill Act of 1862, 1-15
  Morrill Act of 1890, 253
  past, 253-275
  Research in 1890 Institutions Since 1967, 110-146
  Teaching, Academic Programs, and Research, 1920-1967, 94-109
Langston, John Mercer, 40
Langston University (also the Colored Agricultural and Normal University), 25; 66-69; 134-136; 146; 170; 193; 217-218; 245
  'Black Mecca,' 67
  'Little Africa,' 67
Lanier, William H., 6
Larry, Earlene, 170
Law, Thomas M., 260
Lee, D. W., 68
Lee, Irene K., 170
Lee, J. R. E., 27; 58; 59; 160
Lewis, Amelia J., 158
Lincoln University (also Lincoln Institute), 23; 25-27; 140-141; 166; 217-218; 234; 237; 267
Lloyd Gaines v. University of Missouri, 27
Lloyd (Professor), 71
Lockett, J. L., 51
Louisiana, 48; 98; 145
  Baton Rouge State Times Advocate, 41
  General Assembly, 39
  Hanrahan, 41
  Land-grant colleges, 22; 39-43
  New Orleans, 39
  Second Morrill Act of 1890
  State Board of Supervisors, 40
Louisiana Journal of Education, 19
Louisiana State University, 40; 155; 245
Lu, Christopher, 135
Lukefahr, Steven, 176
Lynk, William A., 139
Magee, Charles, 101; 104; 122
Malloy, William, 264
Maryland, 98; 102
  Board of Regents, 53
  legislature, 52
  Maryland Agricultural College (also the University of Maryland), 52
  Maryland State College (also Princess Anne Academy), 52-53; 76
  Second Morrill Act, 52
Massingale, 207
Mayberry, Benjamin D., 113; 161; 184
Mayberry, E. N., 192
Mazyck, Harold, 250
The Mayflies of Florida: Revised Edition, 120
McCray, Jacquelyn, 236
McGee, 207
McGowan, Claude, 174
Mebane, A. L., 57
Mehren, George, 110
Methodist Episcopal Church, 28
Mexico, 126
Michigan State College, 71
Miller, Julia, 204
Miller, Thomas E., 28-29; 30
Minor, L. W., 36

Mississippi, 48; 87; 98
  Land grant, 74
  Mississippi Legislature, 22
  Negro Education, 18
  Southwest Mississippi, 127
Mississippi State University, 128
Missouri, 98; 102
  Board of Curators, 26
  Board of Regents, 26
  Bureau of Education, 26
  Jefferson City, 23
  Land-grant colleges, 22–23; 25–
  Lincoln University, 23
  St. Louis, 27
Montgomery, Oscar, 126
Moore, Eugene, 68
Morgan State University, 52
Morrill Act of 1862, 1–15; 84–85; 99; 100; 103; 164
  Second Morrill Act of 1890, 6–7; 16–43; 44–74; 87–93; 95; 100; 113; 164
  Second Morrill Act of 1892, 6–15; 18–22; 164
Morrill, Justin Smith (Senator), 1–5
Morrill-Nelson Act of 1907, 7; 53
Morris, J. A., 128
Morrison-Evans Outstanding Research Paper, 116
Morrison, Richard D., 93; 112; 115
Moton, Major Robert Russa, 49
Mugwira, Luke M., 116
Myers, Alonzo, 82
The Nashville Globe and Independent, 70
National Academy of Sciences, 110
National Association for the Accreditation of Teacher Education, 66
National Association for the Advancement of Colored People, 115
National Association for Equal Opportunity in Higher Education, 265
National Association of State Universities and Land-Grant Colleges, 111
National Center for Education , 271
National Pest Control Associations, 120
National Resources Planning Board, 82
National Sweet Potato Research Center, 138
National Vocational Education Act, 97
Neal, Edith, 212
Neal, Ernest E., 86
Nelson Amendment to the Morrill Act, 95–
The Negro in the Making of America, 18
Netterville, G. Leon, 179
Neufville, Mortimer H., 139
New Mexico, 135
Newsome, Ross, 167
New York University, 82
New Zealand, 119
Nichols, Francis, 40
Nicholson, J. W., 40
Nigeria, 135
Nobles, John J., 40
Noel, Elizabeth N., 203
North America, 119
North Carolina, 48; 91; 98
  Bureau of Education, 63
  'Cow College,' 63
  Department of Education, 64
  General Assembly, 61
  Greensboro, 62
  Land-grant colleges, 22
  North Carolina Mutual Insurance,161
  Raleigh, 62
  Second Morrill Act, 62
North Carolina Agricultural and Technical State University (also the A&M College for the 'Colored Race'), 61–64; 76; 85; 95; 100; 108; 114; 131–133; 196; 215; 220–221; 222–223; 228; 232; 235; 242; 254; 267
North Central Association of Colleges and Secondary Schools, 72
Oakland College; (see also Alcorn State University), 3
Office of Civil Rights, 114–115
Oberlin College, 54; 56
O'Brien, Charles W., 121
Ohio State University, 109; 261
Oklahoma, 134–136; 170

  Agricultural and Mechanical College at Stillwater, 67
  Colored Normal and Agricultural University, 67
  Land-grant colleges, 22; 66–69
  Legislature, 69
  Logan County, 67
  Stillwater, 67
O'Neal, Otis Samuel, 159–162
Orr, 76; 80–81
Osborne, 38
Ouachita National Forest, 135
Overcash, J. P., 128
Oxley, William, 109
Pace, Ralphenia, 209
Page, Inman E., 25; 67
Paige, Ellen O., 218
Pancholy, Sunil K., 116; 121
Patterson, Zella J. Black, 68
Parker, S. J., 136
Parker, Theophilus R., 35
Peabody Fund, 36
Peabody, Francis G., 10
Peoples, I. C., 108; 261
Perry, B. L., 59; 98; 163
Perry, B. L., Jr., 263
Pescador, Manuel L., 120
Pescatore, Anthony J., 140
Peters, A. J., 37
Peters, William J., 116; 119–120
Petrosky, Bernard, 124
Philippines, 120
Phillips, Bobby, 134
Phills, Bobby, 207
Pinchback, P. B. S., 39
Pinkston, 135
Plessy v. Ferguson, 18; 21
Poland, Crakow, 120
Polytechnic Institute, 9
Potts, 27
Powell, Eunice Davis, 201
Prairie View Agricultural and Mechanical University (also Agricultural and Mechanical College of Texas for Colored Youth; Prairie View Normal and Industrial College), 36–39; 85; 96; 103; 108; 128–130; 144; 186–187; 192; 195; 202; 220; 224–225; 234; 240; 254
Production and Subsistence Loans, 87
Pryor, Albert, 86–87
Quarles, Benjamin, 18; (see also *The Negro in the Making of America)*
Racial segregation, 99; 253
Reddy, J. M., 132
Reid, D. S., 136
Reine, Alden H., 129
Renick, James, 107
Revels, Hiram R., 3–4
Roberts, Thomas N., 81; 82
Robinson, George, 134
Rollins, Robert L., 263–264
John D. Rockefeller's General Education Board, 149
Roosevelt, Franklin, 82
Rosenwald Fund, 182
Rowan, Levi J., 8
Ruthland, J. B., 38
Salisbury State College, 256
Salvage, 25; 27
Sapra, Val T., 116; 126
Savannah State College (also Georgia State College), 65; 92
Schor, Joel, 27; 34; 35–36; 50; 64; 75; 161
The Scope and Restropect, 131
Scruggs, Sherman D., 83
Seals, R. Grant, 101; 117; 119; 144
Secretary of Interior, 20
Segerson, Ed., 132
Self-Help Leagues and Home Demonstration Clubs, 158
Sharma, G. C., 126
Sheats Law of 1895, 19
Sheats, William N., 18–19; 56
Shelkh, Mehboob B., 120
Sherman, W., 26
Shinn, Erwin H., 79
Shuford, James W., 125; 126
Simpson, Ocleris, 134; 161; 169
Singletary, C. C., 128
Singh, Bharat, 116

Singh, Surendra, 143
Slater and Peabody Funds, 33
Slater Fund, 70
Slater, John F., 12
Slaughter House cases of 1873, 17
Smith, Hoke, 152
Smith-Hughes high schools, 79
Smith-Hughes Professor of Agriculture, 98
Smith-Hughes Professor of Mechanical Arts, 98
Smith-Hughes Vocational Act of 1917, 8; 29; 51; 57; 97; 195
Smith-Lever Act of 1914, 7; 35; 51; 53; 57; 59; 88; 97; 113; 153; 162; 164; 182; 187
Smith, Walter, 264
Social Studies Project, 91
South Africa, 120
South America, 119
South Carolina, 48; 91; 98
  Colored Normal, Industrial, Agricultural, and Mechanical College, 28
  Dept. of Education, 29
  Land-grant colleges, 22; 27-30; 74
  Negro Education, 18; 19
South Carolina State College; also
  South Carolina (University of), 2; 11-13; 27-30; 181
  agriculture, 30; 85; 100; 116; 182-183; 196; 203-204; 227; 234; 243; 262-262
South Carolina Methodist Conference, 11
Southeast Consortium for International Development, 268
Southern Association of Colleges and Secondary Schools, 8; 30;
  43; 49; 52; 59; 64; 66; 71
Southern Confernce on Education in Negro Land-Grant Colleges, 75
Southern University, 19; 39-43; 89; 96; 103; 107; 108; 133-134; 17-180; 192; 206-208; 230; 245; 269
  Baton Rouge, 41
  curriculum, 42
  mission, 42
  New Orleans, 41
  State Constitutional Convention, 39
Spain, Granada, 120
Spaulding, C. C., 160
Spaulding, M. F., 69
Stallworth, Houston, 122
Stamps, T. B., 39
Stevens, Clauzell, 126
Storum, James, 49-50
Supreme Court, 88
teacher education, 99; 200
Talladega College, 269
Tennessee
  Agricultural and Industrial Normal School for Negroes, 70
  General Assembly, 69; 71
  Land-grant colleges, 22; 69-71
  State Board of Education, 71
  University of Tennessee, 69
Tennessee State University (also Tennessee Agricultural and Industrial State Teachers College), 70-71; 86; 141-143; 172-173; 195-196; 209-211; 226; 233; 234; 254; 267-268
Tennessee Valley Authority, 85; 91; 183
Texas, 98; 103; 135; 147
  Agricultural Experiment Station, 222
  Alta Vista Plantation, 36
  Bureau of Education, 38
  Constitution of 1876, 36
  Cooperative Extension Service, 38
  Hempstead, Texas, 36
  Land-grant colleges, 22
  Morrill Act, 37
  Waller County, 36
  white primary, 18
Texas A&M University System, 129; 240
Texas Southern University, 92
Third World countries, 105
Thomas, Genevieve J. W., 218-219
Thomas, Winfred, 125
Thomas, W. O., 128
Thompson, Alton, 133
Thompson, Keotus, 57
Thrift, P. E., 207
Tillman, Ben 'Pitchfork,' 19; 27-28

Tiwari, S. C., 128
Troop, C. V., 107
Truman, Harry S., 83; 84
Tucker, Arthur O., 124
Tucker, James F., 258
Tucker, Thomas De Saille, 54-56
Turner, A. A., 58; 159
Turner, B. C., 91
Turner, Carolyn, 132
Turner, Clinton V., 167
Tuskegee University (also Tuskegee Institute), 11; 21; 30; 32; 35; 37; 44-49; 74; 75; 76; 92; 98; 101; 106; 111; 112; 116; 137-138; 143-144; 148-151; 159-160; 162-164; 187; 208-209; 217; 220-222; 223-224; 229-230; 266; 274-275
  First Tuskegee Negro Conference, 48
  School of Veterinary Medicine
  Short Course in Agriculture, 48
  Tuskegee Plan, 50
United Presbyterian Church of North America, 69
United States Congress, 110
United States Department of Health, Education and Welfare, 258; 264; 265
United States House of Representatives, 116
United States Dept. of Agriculture, 26; 110; 133; 143
United States Senate, 4
United States Supreme Court, 254
University of Georgia, 107
University of Maryland (also Maryland Agricultural College), 52-53; 76; 180-181
  Centenary Bible Institute (also Morgan State University), 52
  Eastern Shore, 52; 139-140; 196; 227-228; 234; 243-244; 254; 255; 256; 267-268
University of Vermont, 90
U. S. Agency for International Development, 267
U. S. Bureau of Education, 27; 77
U. S. Census Bureau, 82
U. S. Colored Infantry, 23
U. S. v. Cruikshank, 17
U. S. Department of Agriculture, 79; 81; 82; 108; 115; 140; 148; 169; 172; 221; 222; 230; 274
U. S. Department of Commerce, 78; 108
U. S. Department of Education, 92
U. S. Extension Service and Farm Security Administration, 81
U. S. Navy, 82; 83
U. S. War Department, 82
Vason, Col. W. T., 54-55
Vermont, 1
Vicksburg, 5
Vincent, 40
Virginia, 98
  Ettrick, 49
  General Assembly, 168
  higher education, 50
  Land-grant colleges, 22; 49-52; 74
  Morrill-Nelson Fund, 50
  United Stated Congress, 67
Virginia Agricultural and Mechanical College and Polytechnic Institute, 9
Virginia Normal and Collegiate Institute, 49
Virginia Normal and Industrial Institute, 76
Virginia Polytechnic Institute, 52; 114; 258
Virginia State (College) University, 9; 50; 85; 86; 95; 98; 100; 108; 116; 130-131; 193; 204-206; 226; 234; 254; 258-262; 266; 267
Virginia Tech, 258-259
Voting Rights Act of 1965, 110; 258
Wakefield, Troy, 141; 142; 143
Walker, Addison, 83
Walker, Calvin, 134
Walker, Charles A., 137; 171
Walker, C. E., 119
Walker, Melvin E., 122; 258
Walker, Retia Scott, 217
Wallace, Elsie, 86
Wallace, Henry A., 78; 79
Waller, C. H., 38

BEST COPY AVAILABLE

War Manpower Commission, 82
Washington, Booker T., 6; 11; 31; 33; 44-49; 56; 266
  Atlanta Address, 18; 56
  Atlanta Cotton Exposition, 46
  land-grant colleges, 45-46
  philosophy of education, 45-47
Washington, D. C., 77; 78
Washington, Walter, 127
Watson, J. B., 32
Weaver, Robert, 82
Webb, Burleigh C., 131
Webb, Wesley, 60
Wells, W. M. T., 68
West Virginia
  courses of study, 72
  Land-grant colleges, 22-23; 72-74
  West Virginia University, 72; 73
West Virginia State College (also West Virginia Colored Institute), 72-74; 76; 83; 85; 100; 103; 144
West Virginia University, 100; 102
Whatley, Booker T., 107; 116
Whitcomb, Emeline S., 77
Whittaker, Miller F., 30
Wilkerson, Robert Shaw, 30; 181
Williams, Ashford O., 179
Williams, C. A., 111
Williams, Russell, 107
Williams, T. T., 108
Willingham, William M., 137
Windham, S. L., 128
Womack, H., 140
Women's Conferences, 48
Woods, A. F., 77
Workers' Conference, 48
Wright, Richard R., 64-65
Wynne, William, 82
Yadava, Unedi L., 123
Yang, C. H., 121
Young, Nathan B., 27; 56-58; 76

SECOND MORRILL ACT COLLEGES AND UNIVERSITIES • PROGRESS THROUGH TEACHING, RESEARCH AND SERVICE •

1890-1990

1866 Lincoln University
1871 Alcorn State University
1872 South Carolina State College
1873 University of Arkansas - Pine Bluff
1875 Alabama A&M University
1876 Prairie View A&M University
1880 Southern University
1881 Tuskegee University
1882 Virginia State University
1886 Kentucky State University
1886 University of Maryland - Eastern Shore
1887 Florida A&M University
1891 Delaware State College
1891 North Carolina A&T University
1895 Fort Valley State College
1897 Langston University
1912 Tennessee State University

BEST COPY AVAILABLE

SECOND MORRILL ACT COLLEGES AND UNIVERSITIES • PROGRESS THROUGH TEACHING, RESEARCH AND SERVICE •

1890-1990

1866	Lincoln University
1871	Alcorn State University
1872	South Carolina State College
1873	University of Arkansas - Pine Bluff
1875	Alabama A&M University
1876	Prairie View A&M University
1880	Southern University
1881	Tuskegee University
1882	Virginia State University
1886	Kentucky State University
1886	University of Maryland - Eastern Shore
1887	Florida A&M University
1891	Delaware State College
1891	North Carolina A&T University
1895	Fort Valley State College
1897	Langston University
1912	Tennessee State University

BEST COPY AVAILABLE